



Saint Pancras Public Libraries.

CAMDEN TOWN BRANCH.

Telephone No.: Euston 1976.

The Lending Library is open from 10 a.m. until 9 p.m. every week day, except Wednesday, when it closes at 1 p.m.

The time allowed for reading each work issued, whether one volume or more, is fourteen days. For any book not returned within that period, a fine of one penny for the first week or portion of a week, and two-pence for each succeeding week or portion of a week, is charged.

In cases of infectious disease, books must NOT be returned to the Library, but must be delivered either to the Sanitary Authorities at the time of their call, or to the Disinfecting Station, Camley Street, St. Pancras V N.W.1,—open from 9 a.m. until 5 p.m. Monday to Friday, 9 a.m. until 12 noon Saturday.

No book can be issued unless the reader's ticket is presented or a book returned or exchanged on the day on which it is due.

Changes of address of reader must be notified within one month.

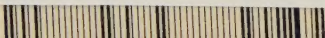
Readers of the Board must be notified of the Board's decision to the Board.

1844

WEST HILL DISTRICT LIBRARY, WANDSWORTH
LONDON, S.W.18.

METROPOLITAN SPECIAL COLLECTION
METROPOLITAN JOINT FICTION RESERVE

THIS BOOK SHOULD BE RETURNED ON OR BEFORE THE DATE
STAMPED BELOW

A blank ledger page with a grid of 10 columns and 20 rows. The first two columns are heavily stained with brown and orange marks, while the remaining eight columns are clean and white.

THE GROWTH OF CIVILIZATION

BY THE SAME AUTHOR

THE CHILDREN OF THE SUN

THE ORIGIN AND MAGIC OF RELIGION

THE GROWTH OF CIVILIZATION

BY

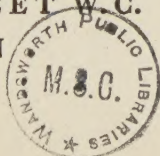
W. J. PERRY, M.A.

READER IN CULTURAL ANTHROPOLOGY IN THE UNIVERSITY OF LONDON

WITH EIGHT MAPS



METHUEN & CO. LTD.
36 ESSEX STREET W.C.
LONDON





901

M

5110

~~4 B Oct 38~~

901 B

200316008

First Published in 1924

ALLOCATION C	CLASS 901	ACC. No. 8745
STOCK CARD b	CHIEF AUTHOR	DATE ACQ. 11 DEC 1935
CAT. CARD	SHEAF TITLE	COLLATE OUT
DOC. sh.		STAMP sh
PRESS-MARK sh		DATE OF ISSUE 3-4-36
		SHEDDING No. 36328

[Res.]

PRINTED IN GREAT BRITAIN

PREFACE

THIS small book is intended as a companion volume to *The Origin of Magic and Religion*. Its aim is to tell, as simply and clearly as possible, the story of the origin and development of civilization and of the spread of culture throughout the world. It may seem impossible to achieve this task adequately within the limits of a book of this size, but as knowledge increases the historical process becomes relatively simple, and there emerge certain broad general principles which characterize its workings. At present there is a tendency to pay attention to the various products of the historical process, and to ignore the process itself. The story of civilization can well be told without names of kings or warriors, except as illustrations of the working of general "laws"; and the discovery of these laws should be the main preoccupation of the historian. Although this book may perhaps contain errors of detail, the general principles enunciated in it are, I am sure, valid, and capable of universal application without serious modification.

Much of the material for this book has been drawn from my works on *The Megalithic*

Culture of Indonesia and *The Children of the Sun*, but I have also used, especially in the later chapters, evidence not mentioned in those works. Anyone who is dissatisfied with my arguments on the ground that they are not sufficiently supported by facts is referred to the works just mentioned.

I am much indebted to Professor Elliot Smith of University College, London, to Professor G. Unwin of Manchester University, and to Miss W. M. Crompton of the Manchester Museum for much advice and help. I must also express my deep indebtedness to the Librarian of the Christie Library of Manchester University, and to his assistants, for the constant and devoted help that they have given me while at Manchester. It is a real pleasure to work in co-operation with such a staff.

MANCHESTER

June 28, 1923

W. J. PERRY

CONTENTS

CHAPTER	PAGE
PREFACE - - - -	V
I. INTRODUCTION - - -	1
II. THE FOOD-GATHERING STAGE OF CULTURE - - -	4
III. THE ORIGIN OF CIVILIZATION -	22
IV. THE OPENING-UP OF EUROPE -	57
V. THE ARCHAIC CIVILIZATION AND ITS SPREAD - -	76
VI. PEOPLES OF THE LOWER CULTURE -	112
VII. THE COMING OF THE WARRIORS -	126
VIII. THE THEORY OF DYNASTIC CON- TINUITY - - -	149
IX. THE CLASS SYSTEM - -	180
X. THE ORIGIN AND DEVELOPMENT OF WAR - - -	191
NOTES - - - -	213
INDEX - - - -	217

LIST OF MAPS

	PAGE
1. RIVER DRIFT IMPLEMENTS IN ENGLAND AND WALES - -	16
2. OLD STONE AGE SITES IN EUROPE -	18
3. THE BEGINNINGS OF CIVILIZATION -	62
4. MEGALITHIC MONUMENTS OF DEVON AND CORNWALL - - -	68
5. EARLY SETTLEMENTS IN THE WEST OF ENGLAND - - -	73
6. MEGALITHIC MONUMENTS OF DERBY- SHIRE - - -	74
7. THE SPREAD OF CULTURE AND THE ORIGIN OF MILITARY ARISTOC- RACIES - - -	76
8. MOVEMENTS OF WARLIKE PEOPLES IN CENTRAL ASIA - - -	142

THE GROWTH OF CIVILIZATION

CHAPTER I

INTRODUCTION

IT is long since biologists have definitely given up the idea of spontaneous generation. While they recognize the fact that certain organisms may, for some unknown reasons, become modified, and give rise to new species, yet they are profoundly convinced of the essential unity of all living organisms. Even when they are unable to demonstrate continuity they postulate it, and it is universally agreed that every living organism is related, ultimately, to every other.

For many years now it has been assumed, tacitly or avowedly, that the human mind works differently ; that it is capable of generating culture wholesale in spontaneous response to the actions of the environment, instead of proceeding by slow and painful steps from one stage to another. The great civilizations are often assumed to be independent products of development in isolation. We speak, for instance, of the civilization of Mexico, of China, of India, and often mean something belonging exclusively to the country in question.

2 THE GROWTH OF CIVILIZATION

The doctrine of spontaneous generation of culture is, we are coming to see, false and misleading. Far from spontaneous development having taken place in all parts of the earth, all that is known of the growth and spread of culture goes to show that most communities in any part of the world that have advanced beyond the food-gathering stage of culture and practise any of the fundamental arts and crafts owe their cultural capital to some other community. This means, as in the case of organized life in general, that every community in the food-producing stage of culture is related ultimately to every other community, by virtue of its possession of a share in the civilization that man has laboriously accumulated. This does not mean that members of any community may not invent some new thing. It simply means that the probabilities against two communities having independently come to elaborate a culture that possesses, say, pottery-making, weaving, and agriculture are so tremendous that it can be assumed with confidence that this has never taken place.

As in the case of biology, students are being forced more and more to believe in continuity, even where it cannot be demonstrated. Every community, with of course one exception, owes its culture to some other community; hence if the process be followed far enough we shall find threads leading from all parts of the world to one centre, the source and fount of civilization. When a wide study of the facts is undertaken



that is the conclusion to which the argument inevitably leads. Civilization is a thing in itself, with its own mode of development. That is the fundamental theme of this book.

To understand the mode of origin and growth of civilization it is necessary to take as wide views as possible. Only in this way can the idea of growth be appreciated. To help the reader to seize this idea Sketch Map No. 7 has been drawn. It brings into focus all stages of development of culture and provides a graphic expression of the historical process as a whole.

Civilization is not a stable product: it is subject to periodic convulsions, such as we have lately experienced; and one of the most serious tasks of the student of society is to determine the causes that produce these convulsions. In the past great societies have come to ruin, and this process has been so widespread that it has been assumed that some law of growth and decay characterizes all social organisms. I have tried in this book to show that this is not the case, but that, when warfare is studied scientifically like any other social institution, it can be shown that mankind has undergone an education in organized violent behaviour. In its earliest stages human society was peaceful; warfare has developed as an accidental excrescence. Warfare has grown like a parasitic plant, until it now threatens to destroy the host on which it lives. If this book helps to turn men's minds seriously to the consideration of this topic I shall be well rewarded.

CHAPTER II

THE FOOD-GATHERING STAGE OF CULTURE

THE world is tenanted by peoples in various stages of culture. At one end of the scale are societies, such as our own, with all the resources of civilization, with innumerable means of overcoming time and space, and of living a life of infinite complexity. At the other end of the scale are those that have made practically no progress in the arts and crafts, who still wander about seeking their food where they may get it. Such conditions still hold in the outlying parts of the earth, in the jungles of southern India, in the wilds of America, in southern Africa, and in other places. Between these two extremes there range a great number of communities whose culture forms a scale merging into that of either end. In any attempt to understand the nature of civilization it is imperative to include all stages of development in the survey.

The fundamental problem confronting any student of the growth of civilization is to explain two facts. It is evident that, at some remote age in the past, the whole world was occupied solely by peoples in the food-gathering stage of culture, who had not begun to cultivate

food for themselves, or to domesticate animals in order to eat their flesh or to use their milk. We have to discover how and why it happened that, after an unknown time lived in this stage of culture, a period that must certainly have ranged over many thousands of years, men discovered how to cultivate food-plants and to breed food-animals, and thus entered the food-producing stage of culture. That is the first problem. The second is to explain why certain communities have not even yet made this step. In any scheme of development these food-gathering peoples cannot be ignored; they must form a permanent background for the drama of civilization, a control for all our reasoning about the manner in which man invented the arts and crafts and elaborated his different institutions. It is just as important to understand why certain peoples have not made any steps towards food-production as to understand why others have made the step. The one problem is the complement of the other.

It is natural to ask at once, What is the connexion between the existing food-gatherers and those of the days before food-production began? Is it found that the culture of these lowly peoples throws any light on the manner in which the first advances were made towards civilization? Such a comparison can only be made on the basis of the material arts and crafts, for we naturally know nothing whatever, except by inference, of other aspects of the lives of the earliest inhabitants, say, of Europe.

6 THE GROWTH OF CIVILIZATION

When we try to compare the food-gatherers that still live on the earth with those which have long disappeared there is but little available evidence ; for, curiously enough, the only food-gatherers who have left remains enough to enable us to study the development of their culture have been those who lived round the Mediterranean thousands of years ago. The food-gatherers of other parts of the world, with certain exceptions shortly to be mentioned, have left practically no trace of their history behind them.

We do not know, of course, how long the food-gatherers of Asia and other continents have lived in their present habitats. But there is good reason to believe that they represent, for all practical purposes, the earliest human occupants of the countries where they are found.

For the convenience of the reader a list is appended of the chief food-gathering peoples :

<i>Africa.</i>	<i>Asia.</i>
Negrito.	Veddas of Ceylon.
Bushman.	Pre-Dravidian tribes of southern India.
	Semang and Sakai of Malay Peninsula.
	Andamanese.
	Kubu of Sumatra.
	Punan of Borneo.
	Tribe in Aru Islands.
	Negritos of the Philippine Islands.
<i>Oceania.</i>	<i>America.</i>
Australians.	Eskimo.
Tasmanians	Déné of Mackenzie Basin.
(<u>now extinct</u>).	Beothuk of Newfoundland (<u>extinct</u>).
	Paiute of Utah.
	Californian tribes.
	Tribes of Tierra del Fuego.

Certain of the Siberian tribes, such as the Samoyedes and Ostiak, who live by keeping reindeer, approximate closely to these tribes in culture, and can, for all practical purposes, be included among them (1).

Some of these peoples are low in the physical scale. For instance, the Negrito of Africa, the Semang of the Malay Peninsula, the Andamanese, the Negritos of the Philippines are all of the dwarf negro race, and certainly are the earliest known human occupants of the countries in which they live. The Australians represent an even more primitive stock. Therefore it can truly be said that an early type of *homo sapiens*, primitive enough for the present argument, still exists on the earth.

With one or two exceptions none of these peoples show any trace of development of arts and crafts. In some cases, of course, they have been influenced by neighbouring food-producing tribes. But when these known influences are subtracted, the only conclusion warranted by the facts is that these peoples have stagnated, culturally speaking, for untold thousands of years. It is only in the neighbourhood of the Mediterranean that any development of culture among food-gatherers can be witnessed. This is important, for, as will be shown in the next chapter, there is every reason to believe that practically the whole of civilization has been elaborated in that region. This focuses the argument upon a definite spot. Hence, when thinking of the development of civilization

8 THE GROWTH OF CIVILIZATION

from its very beginnings, we shall only have to think of one region of the earth, and shall not have to range far and wide for facts.

The exceptions to the rule that none of the food-gatherers have any cultural link with the past are the Bushmen of Africa, the Eskimo of North America and Greenland, and the Australians and Tasmanians. It has been urged by Professor Sollas, in his work on *Ancient Hunters and their Modern Representatives*, that these tribes have in their culture elements in common with that of the early people of Europe. Apart from them, traces are lacking in the outlying parts of the earth of a development parallel to that of the food-gatherers of pre-historic times in the basin of the Mediterranean.

It is possible to study the activities of the food-gatherers of Europe, because they possessed a developed industry in stone, chiefly flint and chert, which they chipped into various implements. From the study of the different geological strata in which these remains are found, and of the animals whose bones are found together with these stone artifacts, it is possible to gain much knowledge of how these early men lived. They lived in Europe, chiefly France, Spain, Germany, and Austria; in North Africa, Egypt, Arabia, Syria, and Phœnicia; and, in the early stages, their industry ranged to South Africa and to India (2).

This Stone Age can be divided into two definite stages, corresponding to the type of man who lived in them. In the first stage,

which Professor Elliot Smith would have us call the *Palæoanthropic* stage, the stage of the *Old Men*, the modern type of man had not yet appeared. He came on the scene in the next stage, which the same authority would call *Neoanthropic*, that of the *New Men*. These two stages can also be distinguished as the *Lower* and *Upper Palæolithic* Ages, the word *Palæolithic* meaning *Old Stone*.

From time to time archæologists, in France particularly, have discovered sites where implements made by men of the Old Stone Age have been made or left behind for some reason or other. It sometimes has happened that the discovery has revealed an entirely new form of stone-working, and this newly found phase of culture has usually been named after the place where typical specimens of the industry were first brought to light. Thus the Lower, or earlier, division of the Old Stone Age is divided into the pre-Chellean, Chellean, Acheulean, and Mousterian periods, all of these names, except the first, being derived from places in France where typical remains were found. In like manner the later, or Upper, period of the Old Stone Age is divided into Aurignacian, Solutrean, and Magdalenian phases. Then comes a stage called Azilian, which marks a transition to the food-producing stage of culture. In northern Europe the Azilian developed into the Maglemosian and Tardenoisian phases of culture; or perhaps it would be less inexact to say the Azilian and

10 THE GROWTH OF CIVILIZATION

the Maglemosian cultures were the two expressions in southern and northern Europe of a borrowed phase of culture. At the end of this phase we find Europe occupied by peoples in the full food-producing stage of culture.

As has been asserted already, the great development of the culture of the Old Stone Age is confined to a relatively restricted part of the earth's surface. This area becomes further restricted as time goes on. For instance, implements of Chellean and Acheulean type, of the early stage of the lower palæolithic phase, are found not only in England, France, Spain, Italy, Russia, and Germany, but in Africa and India. When we come to the Mousterian phase the distribution is not so wide, it being mainly confined to Europe, North Africa, and western Asia. Except southern Siberia and possibly also Tasmania these implements have not been found elsewhere. In the upper phase of the Old Stone Age, the neoanthropic stage of Elliot Smith, the restriction is still more pronounced. The Aurignacian culture is practically confined to the basin of the Mediterranean, and especially to France and Spain. It has not been detected anywhere else in the world, with the apparent exception of the Bushmen, who themselves came from the northern parts of Africa, and therefore do not really constitute an exception. The early peoples of India, for instance, although they had made stone implements of the earlier types, never succeeded in making any of the

later forms. Their industrial development stopped short for some reason or other.

The Aurignacian culture had a wider distribution than the two phases that followed, the Solutrean and Magdalenian. The Solutrean phase is unknown in the Mediterranean basin, except in Egypt. The Magdalenian phase, in like manner, is confined mainly to France; but, again, is identical in more than one way with the industry of Egypt.

The industry of the people of the Old Stone Age is notable. In the first place, the material used was chiefly flint. In some cases chert or quartzite were used, as in India; but this seems primarily to have been due to the absence of flint. What caused men to select flint in the first instance is still a mystery. The stone has certain obvious advantages, such as flaking readily to give a good cutting edge. But it is not the only stone that could so be used. Obsidian, so plentiful in certain parts of the world, could have been used, but it was not brought into use until civilization was well under way. The choice of flint is remarkable when it is remembered that, in a later stage of culture, the neolithic, or New Stone Age, as it is termed, much use was made of hard, igneous rocks for implements, which were made by grinding the stone to a fine cutting edge. Why is it that men went for so many thousands of years without thinking of the adoption of this other form of implement? It certainly is an indication of the lack of inventiveness of

12 THE GROWTH OF CIVILIZATION

mankind. It shows that an industry, once in existence, will tend to persist until something fresh comes to displace it.

The beginnings of the flint industry, in the pre-Chellean and Chellean stages, consisted of the chipping away of flakes from a nodule, so as to provide a cutting edge, the white crust, or patina as it is called, being left behind to form a grip. The result looks like an implement of everyday use, such as is now made by the Seri Indians of California, something useful for grubbing up roots, for severing tendons, for cutting bark, and the like. Crude scrapers and awls were also made in the early phases of the industry.

This form of industry was not destined to persist, for a fresh discovery was made, namely, that the flakes struck off from the original core could themselves be made useful in various ways. In the Acheulean phase the so-called Levallois flake was invented. In the next phase the original Chellean and pre-Chellean implements disappeared for ever, and henceforth the flake reigned supreme in stone industry. These flakes were struck off, and then were chipped to give an edge. They served many purposes, for they included side-scrapers, cutters, points, discs, awls, and blades, all of them obviously intended for industries of the domestic kind.

The industry of the early phase of the Old Stone Age was centred round stone of some sort, principally flint; these people had never thought of using bone or horn for any purpose.

Their minds evidently revolved in a limited orbit, for each phase of development is simply a modification of that which went before, some minor discovery having been made, such, for instance, as the use of flakes instead of the original core.

The people of the early phase of the Old Stone Age knew of fire from very remote times, but they did not begin to live in caves or under rock-shelters until the Mousterian period. Before that they had evidently wandered about in the open, for their remains have been found only in river-beds, and analogous places. It is thought that the limestone caverns in which the Mousterian and later peoples lived had not yet been formed, or were not yet fit for habitation, because the rivers that formed them had not yet sufficiently dried up. However, in Mousterian times, and in those that followed, men lived in caves and under rock-shelters.

When the men of the later phase of the Old Stone Age, who are certainly of the same species as ourselves, came into Europe, they brought with them a culture, the Aurignacian, immensely in advance of that of their forerunners. Their stone industry was still that of flint, and flakes were invariably used; so in this respect they had profited by the discoveries made by their forerunners. But they had begun to use bone for various purposes, and had acquired a wonderful facility in artistic expression, many examples of which have already been discovered on the walls of caves in France and Spain. Where this form of

14 THE GROWTH OF CIVILIZATION

culture was elaborated we do not yet know, but it reached its highest expression in France and Spain. The flint industry of these people betrays manifold traces of their activities, for many new types appear, all of them fit for use in sculpture and engraving. The minds of these men were evidently bound up with their cave art, with their sculpture, engraving, and painting, and they had invented many tools of flint to help them to express their ideas on the walls and ceilings of the caves in which they lived. Bone was used by these men for awls, needles, spatulæ, and lance-points, as well as for a tool which probably was intended to straighten shafts of lances or arrows, if they had any. The technique of flaking flint was immensely superior to that of the preceding phase, the Mousterian. No longer were small semicircular flakes struck off, but parallel flaking was adopted—a technique almost impossible for us to reproduce, and a standing witness to the skill of these early men.

Their art centred mainly round the wild animals that they hunted for food. They engraved, and then painted, on the walls and ceilings of the caverns where they lived, not in the entrance, but in deep, dark recesses, pictures of the bison, wild boar, cave bear, deer, and so on. It seems probable that this art was concerned with the food supply, that the representation of an animal desired for food helped, in some way, in its capture. Some such reason as this must be forthcoming to

explain the localization of these paintings in the depths of these caves.

These people also practised sculpture, depicting boars and other animals that they chased ; but, in addition, they made sculptures of feminine form, with the maternal parts grossly exaggerated (3). These people buried their dead with certain ceremonial, surrounding the body, which, from Aurignacian times onwards, was in a crouched position, with red ochre, and often adorning it with necklaces of shells, bits of bone, pebbles, and animals' teeth and claws.

The Aurignacian stage of culture persisted in Europe for a long time, and in many places was succeeded directly by a food-producing civilization. But in certain parts of Europe, particularly in France and central Europe, there appeared a phase of culture, called Solutrean, almost devoid of art, but characterized by a wonderful technique in the making of flint implements. Flakes were worked off the surface by pressure so as to produce an absolutely symmetrical effect, and thus were made some wonderful tools shaped like laurel and willow leaves. This Solutrean phase was followed, in some parts of Europe, particularly in France, by the Magdalenian phase, which was closely similar to the Aurignacian, but differed from it in possessing bone harpoons, which appeared towards the middle of this age. These harpoons show that the people were largely interested in fishing. The flint industry of the Magdalenian peoples was not

characteristic of the Old Stone Age wherever it is found, and these sites are invariably sources of flint, chert, or quartzite, or else localities with caves, usually of limestone, in which the people could dwell. Sketch Map No. 1 shows that the districts round Brandon in Suffolk, round Dunstable, and in other parts of the chalk region, where flint is to be found, were thickly tenanted in those days; likewise Sketch Map No. 2 shows that particular districts of France and Spain, for instance the valleys of the Somme, Marne, Seine, and Dordogne, certain districts of the Pyrenees and of northern Spain, were favoured; hence caves like that of the Mas d'Azil in the department of Arriège contain traces of successive occupations. The men of the Old Stone Age in Europe had become industrialized, and this had an important effect on their selection of places for habitation. It is, of course, open for anyone to claim that implements of this age may yet be found in quantities in places far from sources of flint, chert, or quartzite (allowing for the possibility of transference of implements from a flint locality to a chert locality, as has actually happened in England, where flint implements of Mousterian form have been found in a chert district in Yorkshire along with chert implements), but the fact remains that no finds of the kind have as yet been made in Europe, or elsewhere. The food-gatherers of other parts of the world, such as those of Ceylon, the Malay Peninsula, and Borneo, do not seem to

18 THE GROWTH OF CIVILIZATION

be tied down to any particular locality, any more than were the Bushmen, except in so far as each family group keeps to its own hunting ground and does not trespass on those of the others. They seem to wander about more or less at will, seeking food here and there. But throughout the regions where men made implements relative fixation of settlement seems to have been the rule. In England, for instance, stone implements are found in places with chalk pits that yield flints, such as round Brandon in Suffolk, Dunstable, on Salisbury Plain, in the London boulder clay, and so forth. We do not find them on granite formations, or on the old red sandstone. In Palestine and Phœnicia, again, we are told that the settlements of men of the Old Stone Age were invariably situated near flint workshops, no implements having been found elsewhere (4). Egypt, another important country in the Old Stone Age, is rich in flint. In India, too, the late Mr. Bruce Foote says definitely that palæolithic implements are found only on those geological formations that yield quartzite and other stones that were used for the manufacture of implements (5).

Social life, therefore, in the Old Stone Age, seems to have moved from one source of raw material to another, and therefore the problem of determining the course of development of this form of culture is relatively restricted in nature. We know, more or less, where to seek for our information; we must look to places affording the raw materials used in this age.



○ All Stages
+ Acheulean only

There are certain signs of intercourse in this age. In some of the burials of France there are shells that must have been brought from a distance. In some cases these shells probably came from another part of the country. But one instance is more striking. In a cave near Mentone there have been found, associated with a burial of the Aurignacian period, cowrie shells that must have come from the Indian Ocean (6). These shells are eloquent witnesses to intercourse of some sort or other in those far-off days between widely separated parts of the earth. Elliot Smith has shown, in his work on *The Evolution of the Dragon*, why these shells were used in such remote ages. They were supposed to have life-giving powers. It is fascinating to think of the men of those early times carrying shells for such great distances. They must indeed have valued them highly to have gone to such trouble.

France and the East can be connected in yet another way. It has already been remarked that, while the earliest phases of the flint industry were widespread, extending even to South Africa and India, the later developments were confined to the basin of the Mediterranean, and, in Europe, particularly to France and northern Spain. One other country seems to share with France the honour of being the scene of the most intense activity in palæolithic times, and that country is Egypt. From Chellean to Magdalenian times it is possible to parallel the industries of France and Egypt:

and this comparison may indeed go still further back than the Chellean period. Egypt possesses ample stores of flint along the banks of the Nile, and is well suited to be the home of people who made implements of that stone. It is remarkable that all stages of development should be found in Egypt. Even the Solutrean, which has but a limited range in Europe, and is unknown in Syria and Palestine, as well as in North Africa, is highly developed in that country, the Egyptians having retained the technique for their wonderful flint knives down to the Twelfth Dynasty and later. The relations between the Magdalenian cultures of Egypt and France are also interesting; for one important feature of the period was the use of bone harpoons, a natural practice in a community living by the side of the Nile, but not so natural in France and the Pyrenees. These facts, when associated with the use of cowrie in France, with a shell brought from the Indian Ocean, must certainly be borne seriously in mind when thinking of the problem of the development of the industry of the Old Stone Age. Moreover, it must be noted that the technique of the flint industry of Egypt is recognized as being superior to that of surrounding countries. We are told that, while the peoples of Syria, Palestine, and North Africa made Aurignacian implements of types similar to those of the Egyptians, they never succeeded in equalling them in technique, nor in making so many forms. And in regard to the knives made by the Egyptians with a

Solutrean technique, there can be no doubt of their superiority over all similar products. This is but one instance of a general theorem that will be found to be of practically universal application, namely, that the Egyptians invariably excelled all other ancient peoples in their skill in the manipulation of raw materials.

Since in no other country, so far as is known at present, has a development of the flint industry been discovered comparable to that of Egypt, France, and Spain, it seems certain that it is to one or other, perhaps all, of them that we must look for the scene of the various inventions made during the Old Stone Age. The possibilities of discovering alternative sources of development are but few, Asia Minor, North Africa, and Arabia being, perhaps, the only countries left to us, and the facts do not suggest that any of them will reveal a wealth of implements such as has been found in Egypt. Since there has been, we may presume, a continuous occupation in Egypt, it is possible that the various inventions were made there, and propagated to Europe, along with the Mentone cowrie shells. This would readily account for the successive incursions of Aurignacian, Solutrean, and Magdalenian cultures, and especially for the bone harpoons of Magdalenian times. But this is, of course, at the present, mere surmise.

The chronological difficulty that will spring to the mind of some readers of the foregoing paragraph will be found to loom less prominently when the facts are calmly investigated.

CHAPTER III

THE ORIGIN OF CIVILIZATION

WHILE the great development of stone industry was taking place in Europe the peoples of the rest of the world were, it seems certain, living lives similar to those led by the present-day Veddas of Ceylon, the Punan of Borneo, and others—minus the effects of contact with more highly civilized peoples—and had made no advance whatever towards the foundation of civilization. They had among them no inventive geniuses like those who produced the cultures of the Upper Palæolithic Age in Europe. They were, also, far removed from the centre of development of the stone industry, and were unable to take advantage of the successive inventions that had been made. It is therefore not reasonable to look to places such as Australia, America, Indonesia, and elsewhere for signs of the beginnings of food-production. Indeed, there is no reason whatever to lead us to believe that the peoples of these outlying regions would ever, without outside influence, have discovered agriculture or stock-rearing.

Peoples of the lower culture are improvident and conservative: if they have plenty, they gorge; if they have little, they starve. What

is more, it can be shown, in Borneo for instance, that food-gathering tribes are at the present day being taught agriculture by food-producing tribes; and there are abundant reasons for believing that this has happened throughout the world. Also, it can be shown that, in all parts of the world, the earliest form of agriculture was by means of irrigation, and that dry cultivation of the soil came later.

In seeking for the origin of food-production it must be remembered that the Mediterranean littoral was certainly the scene of the main developments of culture in the Old Stone Age; that the greatest civilizations of antiquity and the earliest grew up in this region. It must be remembered that in America, for instance, there is no reason to believe that the food-producing stage of culture goes back much before the beginning of our era; the civilizations of China and India are certainly of much more recent date than those of the Ancient East. Only in the eastern Mediterranean can dates earlier than 2000 B.C. be spoken of with confidence. It is, of course, open for anyone to claim that further research may reveal evidence of greater antiquity of food-production in the outlying parts of the world, but such negative reasoning is worth but little, especially since the beginning of this century. We have now fairly well mapped out the earth, and the possible sites of ancient civilizations are known with a fair degree of certainty. Such appeals to ignorance are worth little at the present time;

24 THE GROWTH OF CIVILIZATION

we have ample facts on which to build surely, and one conclusion that is perpetually being strengthened is that the Ancient East—which includes Egypt, Crete, Babylonia, Elam, Asia Minor, and Syria—represents the home of civilization.

The earlier food-producing peoples were those of Egypt, the Ægean Archipelago, Crete, Sumer, Elam, Syria, Asia Minor, the Caucasus, Turkestan, Baluchistan, the Danube valley, the Balkans, Greece, Italy, and the middle Euphrates. Scattered throughout this region are communities so similar in culture that, taken together, they constitute a definite cultural unity, the first known civilization of the world. The people were agricultural, and sometimes they had domesticated animals; they made flint sickles; they all possessed the crafts of pottery-making, spinning, and weaving; the ornamentation of their pottery was similar, and peculiar to them; in some cases they were already making copper implements of similar form; they lived in brick houses; they made implements of flint and also of hard stone, in the latter case by grinding, and not exclusively by striking off flakes; sometimes they made vases of hard stone.

This early civilization covered a continuous area. Year after year fresh sites are being discovered, and these reproduce, in all essentials, the features of those already known; so that there is little reason to believe that we shall ever find anything very different in this region.

For instance, the Pumpelly Expedition discovered, at Anau in Turkestan, near Askabad on the railway to Merv, several mounds which, on excavation, proved to be the sites of ancient settlements (1). The lowest stratum of these mounds yielded hand-painted ware with geometrical designs, similar to that found in Egypt, Elam, and elsewhere; wheat and barley, both of them grown in Egypt at an early age; rectangular houses of sun-dried bricks; flint implements recalling the Solutrean technique practised by the Egyptians; stone mace-heads; bone awls; spindle whorls; copper and lead; mealing-stones; and turquoise beads. There are no local traces whatever of a previous development leading up to these achievements, and all the signs point to a settlement of immigrants for some purpose or other. These people evidently were irrigators, for near their settlements run old irrigation canals, which they probably made. Certainly their immediate successors, who had an almost identical culture, used these canals. This outlying settlement looks as if it were that of men from the west or south, for the people not only had long heads, in distinction to the broad-headed local population, but heads conforming definitely to the type of Sergi's Mediterranean race.

Again, take the first settlement at Susa, the capital of Elam, and of Persia in later times, which has been excavated by M. de Morgan and his colleagues. In the lowest layers there

26 THE GROWTH OF CIVILIZATION

were found flint sickles exactly like those peculiarly arbitrary and distinctive forms made by the pre-dynastic Egyptians; foundations of houses made of sun-dried bricks; polished stone implements; hand-made painted pottery with designs obviously derived from those on pre-dynastic Egyptian painted pottery; flint implements of Solutrean technique; forms of burial like those of late pre-dynastic Egypt; and copper implements, all of them exactly similar to those possessed by the pre-dynastic Egyptians, and appearing suddenly in the country without any sign of previous development there. The Elamites, like the people of Anau, knew how to irrigate, for they installed irrigation canals near their settlements (2).

It matters not whether the early settlements of Susa, of Anau, of Sumer, or of Asia Minor be examined, it will be found that, in all essentials of culture, they resemble one another, and all, consequently, resemble Egypt of late pre-dynastic and early dynastic times.

I have so far not mentioned the fact that these old settlements reveal clear traces, in their culture, of a continuity with those of the Old Stone Age. Mention has been made of flint implements of Solutrean technique—a technique not found in the Old Stone Age—round the borders of the Mediterranean, except in Egypt. That, in itself, when the scarcity of Solutrean sites is remembered, is highly significant. But the most important link between the early food-producing communities and those

of the Old Stone Age is provided by the images of the Great Mother that are found everywhere in this civilization. Throughout the area marked on Sketch Map No. 3 these images are found, and their relationship to those of the Old Stone Age is obvious. When it is remembered that these images are not found elsewhere in the world their continuous distribution throughout this area must come as conclusive evidence of the continuity between the early food-producing civilization and the Old Stone Age.

As has just been said, signs of beginnings are lacking in the earliest civilizations of Elam, Sumer, and elsewhere. These civilizations appear suddenly, evidently from elsewhere. Since there are patent signs of continuity with the Old Stone Age it follows that the beginnings of this food-producing stage of culture must be sought in a place revealing evidence of a previous occupation by a people in the earlier stage of culture.

The criterion of continuity is most valuable in the study of the development and spread of culture. Throughout the Old Stone Age each period possessed something of its predecessors, and it handed something on to its successors. Traces of continuity exist between the Old Stone Age and the early food-producing civilization. The first food-producing civilization can therefore be regarded as having begun with the addition of one cultural element to the equipment of the people of the Old Stone Age.

Further, since these people were living in the Stone Age, they presumably would inhabit a flint-yielding country.

It is often asserted that the early civilization of Sumer and Elam must have come from central Asia. This is highly improbable, because there is no sign, so far as I am aware, of any palæolithic occupation of this region, certainly not of the later stages when stone images were made. It is far more reasonable to look to some place within the area of greatest activity during the Old Stone Age, the Mediterranean basin, for signs of the transition from food-gathering to food-producing.

Since, again, the first food-producing communities practised irrigation, the country of its origin must be one where a natural explanation can be given of the origin of this craft. It seems hopeless to seek to assign any cause why the people of central Asia should have made this step any more than the people of any similar region. But, what is more important, there is not a scrap of evidence even to suggest that they did so. In contradistinction to this complete lack of information to justify the speculation of the derivation of Sumerian or Elamite civilization from central Asia, all the available data point clearly to Egypt as the source of the inspiration.

Egypt is the country that satisfies all the conditions: the pre-dynastic Egyptians possessed the Solutrean technique of flint-working, in which they excelled the rest of the world;

they had also the Magdalenian industry, for they made bone harpoons of Magdalenian types, and Magdalenian flint flakes ; they made images of the Great Mother ; they worked in ivory, as did the people of the Old Stone Age ; and their country possessed great stores of flint.

Egypt is also the most likely place in all the world for men to have discovered irrigation. For the Nile had been teaching men the lesson year by year, until one of them had wit enough to learn it, and to apply it to his own ends.

We owe the discovery of the importance of the Nile in the history of agriculture to Professor Cherry, who, in a paper read before the Manchester Literary and Philosophical Society in 1921, first announced the results of his investigations (3). Professor Cherry, who was formerly Professor of Agriculture in Melbourne University, was stationed in Egypt and Palestine during the war. This turned his attention to the problems of the civilization of Egypt. It was while there that he made his great discovery, which places the study of the origin of civilization once and for all on a firm footing. He realized that the Nile flood was of fundamental importance, on account of the manner of its occurrence year after year. This flood comes on, year in year out, about the middle of July, and gradually rises to a maximum about the middle of September, after which it declines and finally reaches the normal level in November. From the consideration of the habits of food-gatherers in other parts of the world we

may be assured that the early Egyptians were collecting every year the grains of the barley and millet that grew in the mud left by the Nile flood. The harpoons of the Magdalenian period show that they were actively engaged in fishing, and therefore were in close contact with the river. There is practically no rainfall in Egypt—or, at any rate, not enough to affect the habits of the people—so the primitive Egyptians would be dependent on the Nile for the cultivation of any vegetable food that they had. The summer in Egypt was hot and dry. When the flood of the Nile came on at the end of the summer any grains of barley and millet that had escaped the attentions of the birds would be embedded in the mud, and, when the flood subsided in the autumn, would sprout and grow rapidly in the genial warmth of the Egyptian winter. The crop would ripen at the end of the winter, and the seeds would fall on to the hot, dry sand and remain there during the summer, free from the attacks of mildew and rust that they would experience in rainy countries. When the flood came on again at the end of the summer the grains would be there ready for the water; they would germinate and a new crop would spring up. Thus year after year the Nile valley would, by means of its perfect irrigation cycle, be growing millet and barley for the Egyptians. All that would be necessary, therefore, would be for some genius to think of the simple expedient of making channels to enable the

water to flow over a wider area, and thus to cultivate more food. Once the control of water was begun there is no obstacle whatever in the way of the installation of a complete irrigation system such as is found in Egypt.

When we turn to other river basins where a similar event may have happened, we nowhere find, says Professor Cherry, a similar condition. The peculiarity of the Nile flood is the result of the source of its water being so far away, so that it takes months for the flood to travel down-stream. In the case of the Tigris and Euphrates the flood comes on at the beginning of the summer. Therefore when it subsides in the middle of the summer the young plants that had grown up would soon be scorched by the hot sun and would die. So, as is evident, anyone who began to irrigate in the valley of the Euphrates must have known beforehand what he wanted, and this empirical knowledge could not have been acquired in Mesopotamia. This agrees with the fact that there are no signs of palæolithic man in the parts of Mesopotamia where civilization can first be detected, the region being geologically young and devoid of flint, and therefore not a likely place for the transition from food-gathering to food-producing to have taken place. What is more, there is every reason to believe that the first civilized communities in Mesopotamia were founded by people from elsewhere, for there are no traces of the evolution of culture in this region as there are in Egypt. This is im-

portant, for the valley of the Euphrates is one place where civilization appeared almost as soon as in Egypt.

There is very little probability that the craft of irrigation was invented in the basins of the Ganges or the Hoang-Ho, for in both these cases there is an entire lack of evidence to take the beginnings of civilization back much beyond 2000 B.C. at the earliest, whereas in Egypt and Sumer beginnings go back beyond 3000 B.C. All the available evidence thus points to Egypt as the place where the transition took place from food-gathering to food-production.

Not only can it be shown with much probability that the Egyptians took the first step in food-production, and thus laid the foundations of civilization, but it can be shown with equal probability that they invented many of the fundamental arts and crafts; or, if they did not obviously invent them, they were the first known people to practise them. The following is a list of some of the more important of these elements of culture (4). Doubtless many other items could be added, but the list is enough for the present purpose:

Cultural Elements that Appear first in Egypt.

Alchemy	Gold
Beads	Inlay
Copper Implements and Ornaments	Jewellery
Emery for Stone Vases	Maces
Faïence	Polished Stone Implements (Nubia)
Glaze	Pottery

Ships
 Stone Buildings
 Stone Vases
 Use of Lead, Silver,
 Turquoise
 Weaving

Children of the Sun
 Ideas of Immortality
 Mummification
 Portrait Statues
 Solar Calendar
 Sky-world
 Sun-cult

Many other items could perhaps be added to this list. For instance, in the second edition of *The Ancient Egyptians* Elliot Smith says: "The Egyptians did a great deal more than merely invent agriculture and devise the earliest statecraft and religion. Not only did they devise the methods of working wood and stone and the art of architecture, they seem also to have been the inventors of linen and of the craft of weaving, of the use of gold and copper, and the making of metal tools and implements. They were the first people to measure the year and to devise a calendar, and later on to substitute for the rough calculation based upon the date of the annual Nile flood the exact measurement based upon the observation of the sun's movements. They also invented shipbuilding and constructed the first sea-going ships. In a thousand and one of the details of our common civilization the originality of Egyptian civilization is revealed. The art of shaving, the use of wigs, the wearing of hats, the invention of the kilt and of the sandal and subsequently of a variety of other articles of dress, many of our musical instruments, chairs and beds, cushions, jewellery and jewel-cases, lamps—

these are merely a few of the items picked at random out of our ancient heritage from the Nile Valley " (page 7).

It seems certain that one general principle can be laid down when considering the question of the origin of any great invention. No one has ever made more than a slight step forward in knowledge at one time. Every important discovery or invention has usually been the work of many men, the one who gets the credit being he who added the last link to the chain. This is a commonplace in modern times; for one has only to think of the discovery of the telephone and of wireless telegraphy to be convinced of its truth. So, in looking for the origins of any art or craft attention must be fixed on homely matters, and especially on the conditions obtaining in the community where the discovery is supposed to have taken place. This is well seen in the case of the discovery of the use of copper. It is well known that the pre-dynastic Egyptians were in the habit of painting their faces with malachite, the green ore of copper, which they powdered on their slate palettes. They chose this ore because of its colour. As has been shown by Mr. Donald Mackenzie, they considered that the green was a life-giving colour, so that green paint worn on the cheek would protect the wearer. They thought that green was life-giving because that was the colour of the Nile flood water when it first started in July. This was produced by the vegetable matter that was carried down-stream

from the Sudan. The Egyptians argued that the vegetation produced by the Nile flood was green because the green water made it so. They did not, or would not, recognize that the water itself was green because of its colouring matter. So they used malachite to give them more vital substance. In course of time they found that this green paint, when fused, produced copper, and of this metal they made beads and foil, then pins, and finally knives and chisels. Thus came about, by a series of steps, one of the most important events in the world's history, the invention of the copper chisel. It was this invention that brought about the great forward movement in culture that took place about the time of the inauguration of the First Dynasty of Egypt. The important point to remember about this use of copper is that in no other country of the world can a like process be witnessed. It is, of course, easy to say that the future may bring forth evidence of a like independent origin of copper in some other place; but until that evidence is forthcoming it is best to rest content with the working hypothesis that the Egyptians discovered the use of copper.

It is probable that the world is indebted to Egypt for the crafts of the potter and the weaver, although the evidence is not conclusive in this matter. It is certain that the ancient Egyptians were using ostrich shells and gourds as water vessels. It is probable that pottery making arose in imitation of such vessels. The

pre-dynastic Egyptians were in the habit of providing ostrich eggs with necks, and thus produced types of vessels exactly similar to those made by the people of the early civilization with whom we are concerned. This is a natural mode of origin for pottery, for it simply assumes that the craft is the modification of an existing practice, and was not the result of a jump, such as would be demanded by other hypotheses.

The question of spinning and weaving is more difficult. Reliance has to be made on the fact that the most ancient linen has been found in Egypt and that the pre-dynastic Egyptians had abundance of flax growing in the Nile valley, and also that they surpassed the rest of the world in ancient times in their weaving, a point which is mentioned by Herodotus when insisting on the Egyptian origin of the Colchians.

Every authority on the subject of naval architecture agrees that the Egyptians were the first builders of ocean-going ships. For many years now it has been the fashion to represent the Egyptians as people who stayed in the Nile valley. But nothing is further from the truth. At least as early as the beginning of the First Dynasty (*circ.* 3300 B.C.) they were sending out expeditions to other countries for various substances that they desired. This fact has an important bearing on the question of the origin and spread of civilization. The pre-dynastic Egyptians painted on their pots

representations of what may be vessels, with cabins and oarsmen, and these vessels must have been of considerable size. In the first dynasties the Egyptians made great strides in the craft of shipbuilding, and nowhere can any traces be found of any parallel activity. Moreover, the earliest sea-going ships of other peoples are clearly modelled on the same arbitrary plans as those of the Egyptians. To Egypt, therefore, must, in the absence of any evidence to the contrary, be accredited the honour of being the pioneers in shipbuilding.

Another probable contribution made by the Egyptians to the ancient world was the invention of the polished stone implement. This went round the world in later ages, together with other elements of culture invented by the Egyptians, and thus it is well worth mentioning. The pre-dynastic Egyptians were very skilled in rubbing down hard stones for the manufacture of vases and so on. But they never made any implements of these stones, and continued for long ages to use flint for their knives and scrapers. But very early in the pre-dynastic age they went to Nubia to get gold. Nubia is bare of flint. On the other hand, it contains plenty of hard stone just suitable for the manufacture of polished stone implements. Since the Egyptians in Nubia would need implements of various sorts, and lacked their beloved flint, it is reasonable to believe that they utilized the stone that they found to hand, and made implements somewhat of the

pattern of their copper chisels, but whether in direct imitation of them it would not be easy to say. This would account for the fact that, while polished stone implements are found in quantities in Nubia, and often in graves, they have never been found in a grave in Egypt. Of the continuity between Egyptian and Nubian culture there can be no doubt, so there is no question of the independent origin of the polished stone implement by a people living apart from the Egyptians.

It is important to note that practically every settlement of this early civilization, in all parts of the Ancient East, contains examples of polished stone implements, all of them of similar types.

Mummification was certainly one of the most important contributions of the Egyptians to the world's culture; for round it centred a large group of beliefs and practices, which have been discussed in *The Origin of Magic and Religion*. It was in connexion with this practice that the Egyptians developed their ideas of immortality, and thus started a train of thought the vast consequences of which it is impossible to estimate.

Space will not permit of further discussion of this topic, but a careful examination of works such as Capart's *Primitive Art in Egypt* will convince the reader of the great fertility of invention on the part of the early Egyptians. When compared with Sumer, Elam, Crete, and any other community of early days, Egypt

stands supreme, and this supremacy becomes more evident with every accretion to our knowledge.

It is practically impossible, in the early times with which we are dealing, to show that any cultural element whatever was introduced to Egypt from abroad. This sounds a strong statement, but the sceptical reader is referred to works like the late Professor L. W. King's *Sumer and Akkad*, and his joint work with Mr. H. R. Hall on *Egypt and Western Asia*, for a virtual confession of the inability of these writers to make out any case whatever for Babylonian influence on Egypt. One of the sole elements of culture for which any case can be supported is the cylinder seal, which certainly may have been invented outside Egypt. But apart from that, and other unimportant items, there is little that can be said to have been introduced to Egypt from elsewhere prior to the end of the Pyramid Age.

The Egyptians excelled all other ancient peoples in their mastery over materials of the most diverse sorts. I quote the words of de Morgan, who claims without ceasing that Egypt owed its culture of the early dynastic period to Asiatic influences, as witness to that fact. He says: "But what appears at a very early date in Egypt is perfection of technique. The Egyptian appears, from the time of the earliest Pharaohs, as a patient, careful workman, his mind like his hand possesses an incomparable precision: whatever material he treats,

he forces to obey him with a mastery that has never been surpassed in any country." Speaking, again, of the vases of hard stone that the Egyptians manufactured he says: "Of all the countries in which vases of hard stone have been manufactured, it is assuredly Egypt that has furnished the most skilful workers in this art. Every material, even the hardest and the most fragile, have been treated with a surprising mastery. The summit of this industry seems to be contemporary with the first Pharaohs, although stone cutting was known before that time: at Nagada, at Abydos, the royal tombs and those of certain contemporaries contained perfect marvels, which, unfortunately, have been broken by fire" (5). In only one instance, so far as I am aware, is it possible to claim that the Egyptians have been equalled in a craft: that is the case of the decoration of the painted pottery in the lowest layer at Susa. There is no doubt that this pottery was modelled on that of the pre-dynastic Egyptians, for the Susians have reproduced the rows of flamingos that are so clearly depicted on the Egyptian vases in a conventional manner. They have also reproduced other features of Egyptian pottery decoration. But it is certain that their technique in the arrangement of the ornament is equal to, if not better than, that of the Egyptians. This applies, of course, to the decoration only; there is no reason to believe that the Elamites were superior to the Egyptians in the manufacture or design of pottery.

However, this high standard is not maintained, for the pottery of the next phase is far inferior (6).

It is possible that the explanation of this high standard of early Elamitic pottery decoration may be that it was the result of the specially fine clay that Susa possesses, a clay far surpassing that of Egypt. With a superior material on which to work, it is possible that the potters were inspired to create new developments in their art.

This brings us to a point which is of extreme importance in the theory of the development and spread of civilization. It is found that none of the early communities, with the solitary exception just mentioned, equal Egypt in mastery of the arts and crafts. Certain of them—Crete, for instance—may perhaps equal Egypt in some respects, which is doubtful, but in no case can the all-round superiority of Egypt be challenged. This applies to everything that the Egyptians did, from their flint knives to their jewellery and their stone vases. In everything they were supreme. Does not that constitute evidence bearing on the question of the place of origin of these arts and crafts? It is a rule that a community which has acquired an art or craft from another does not surpass, or even equal, its teacher. The case of the Susan pottery is the only possible exception to this rule of which I am aware. It is only when a new development is being made that an advance seems to be possible. Therefore, when Egypt

42 THE GROWTH OF CIVILIZATION

stands out from age to age, from Aurignacian times onwards, supreme in the arts and crafts, approached by none, is it not the fact that this supremacy is a witness to the originality of the Egyptians ? Does it not show that the Egyptians must have created these arts and crafts in which they excelled ? If this is not so, then the case of Egypt is an amazing exception to a rule that holds throughout the world and in all ages. Not only were the early Egyptians superior to the peoples of Elam, Sumer, Crete, and elsewhere in their technique, but their culture was richer than that of any other community of the same period. Just as in Aurignacian times they made a far greater variety of flint implements, so, later on, when food-production had begun, they possessed a more elaborate culture than their neighbours.

It is possible to claim that this apparent superiority in wealth of culture is due to the fact that so much more is known of pre-dynastic Egypt than of early times in other countries, on account of the preserving effects of the sand. But, in view of what is known, it must be acknowledged that pre-dynastic Egypt possessed a richer culture than that of any other known settlement of the earliest food-producing civilization. We do not find in Susa, at Anau, in Greece, and elsewhere the wealth of articles of toilet, such as the combs, the ivory spoons, the flint knives, the glazed articles, the games of various sorts, the paste figures, and the vast variety of pottery and stone vases that the

Egyptians possessed at a very early date. This may be due to chance; nevertheless the fact is there to be explained, and the most natural explanation is that the Egyptians were the originators of many elements of civilization, and that the other communities had not come yet into possession of all of them.

The Egyptians were presumably the inventors of ocean-going ships. These boats were built, so far as can be told, for the purpose of fetching from other countries things that the Egyptians needed in their industry, and the foundation of civilization in outlying places was primarily due to this activity. Conclusive evidence of intercourse with the outside world in pre-dynastic times is afforded by the list of materials used by the pre-dynastic Egyptians, which includes coral, copper, emery, galena (lead ore), hæmatite (iron ore), lead, lapis lazuli, mica, obsidian, resin, serpentine, silver, tortoise-shell, and turquoise (7). Many of these substances must have come from abroad; for coral, iron, emery, lead, and silver, to mention only some of them, are not known in Egypt. The realization of this foreign intercourse of the Egyptians makes the foundation of civilization in other countries perfectly obvious. For instance, what is more natural than that the Egyptians, having discovered the use of copper for chisels, and consequently needing the metal in great quantities, should send out mining expeditions to those countries that possessed stores of it? That readily accounts for the

44 THE GROWTH OF CIVILIZATION

settlements at Susa and Anau, not to speak of Sinai and elsewhere. In the case of Susa there suddenly appears, in a region possessing copper ore, a culture very similar to that of Egypt, and the people who brought it began to make irrigation canals and to settle down. They used copper themselves. What more natural than to assume that this settlement was the consequence, direct or indirect, of the invention by the Egyptians of the copper chisel, which stimulated a search for copper?

According to Elliot Smith, the discovery that above all stimulated the early Egyptians to make their first adventures into the unknown was this discovery of the copper chisel (8). This discovery came towards the end of the pre-dynastic period, and it was followed by a great burst of activity. For, as he urges in his work on *The Ancient Egyptians*, the possession of a tool of that quality would vastly stimulate the crafts of the carpenter, of the stoneworker, and so forth. In view of this claim it is significant to note that the first settlements of Susa in Elam, and Anau in Turkestan, as well as in Sumer, were those of men who possessed copper chisels. Undoubtedly there was a great mutual stimulation of civilization in those days, from whichever side the influence came.

It is imperative to be quite clear what is the present state of opinion on this matter. So far as I can tell it is something like this. Certain students claim that Egypt was the home of civilization, and that all the major arts and

crafts originated there. They base this claim on the fact that no evidence has yet been adduced to show how any of these elements of culture originated in other countries ; also on the fact that, in places such as Sumer and Elam, the two countries that are always put forward as the active agents in influencing Egyptian culture, there are no signs of beginnings, but that, on the contrary, the culture of these places must have been imported. This is admitted on all sides. On the other hand there are those who assert that, just before the beginning of the First Dynasty in Egypt, about 3400 B.C., there came into Egypt from the East an influence that brought with it writing, the use of the copper chisel, the making of bricks, of cylinder seals, and certain other elements of culture. The supporters of this view assert that this influence came from Sumer or Elam, and that it was probably brought by Semites, who, according to some, conquered Egypt and founded the united kingdom. That is, to the best of my knowledge, a fair statement of the present position.

Since the culture of Sumer and Elam, that was so to influence Egypt, came from elsewhere, whence came it ? The answer usually given is that it came from the mountainous country of central Asia. But in view of the entire lack of any direct evidence of the beginnings of this culture, and in view of the positive evidence of the beginnings of copper-working in Egypt, to speak only of one thing, this view is greatly

suspect, especially as it rests on certain symbols used by the Sumerians and Elamites, such as "mountains," which are capable of a very different interpretation from that put on them by most students.

The Sumerian stories of origins themselves tell a very different tale, for from their beginnings the Sumerians seem to have been in touch with Egypt. In their earliest texts they mention Dilmun, Magan, and Meluhha (9). Where are these three places?

Dilmun was the first settlement that was made by the god Enki, who was the founder of Sumerian civilization. He was the god of the first Sumerian city of Eridu, situated on what was then the head of the Persian Gulf. Enki is said to have come up from the Persian Gulf, and to have taught the Sumerians their civilization. He is also said to have come in a ship. Thus the Sumerians themselves closely associate the origin of their civilization with the Persian Gulf, and with men who came in ships. Of late years a considerable amount of discussion has taken place with regard to the localization of Dilmun, Magan, and Meluhha, which are always mentioned together, as places noted for their ships and dates. Magan was famous among the Sumerians as a place whence they got diorite and copper, Meluhha as a place whence they got gold. Dilmun has been identified with some place or other in the Persian Gulf: perhaps the Bahrein Islands, perhaps a land on the eastern shore of the Gulf;

in any case, it was situated in the Gulf itself. With regard to Meluhha and Magan there is some dispute. In a late inscription of the Assyrians it is said that Magan and Meluhha were the archaic names for Egypt and Ethiopia, the latter being the south-western part of Arabia and the part of Somaliland that lay opposite. For this reason it has been concluded by some scholars that Magan and Meluhha were actually Egypt and the place called by the Egyptians the land of Punt. Egypt certainly possessed stores of copper in Sinai and Nubia, and diorite was plentiful in those regions also; and Arabia was noted for ages as a land of gold. The two countries therefore can well have been the Magan and Meluhha of the Sumerians. Mention is also made, in early Sumerian inscriptions, of a Magan pig, which certainly was an Egyptian pig; and this is another reason for identifying Magan with Egypt.

While this interpretation is disputed by Dr. Langdon, he admits that Sumer was, in the earliest times, in close connexion with Egypt and Punt by way of Magan and Meluhha, which he places in the Persian Gulf. Therefore the evidence, even at its weakest, associated the beginnings of Sumerian civilization with the Persian Gulf, and with countries lying in it or approached by way of it, rather than with countries lying in Asia. The evidence certainly does not warrant the belief that Sumerian civilization came from central Asia.

It is usual to assert that the Egyptian

civilization of the late pre-dynastic age and the early dynastic age was influenced by Semites who came from the direction of Sumer, and brought with them the copper chisel and other elements of culture. As a matter of fact, the evidence on this point is entirely in the opposite direction. It is agreed that the first inhabitants of Sumer were non-Semitic in language, and that at some later time there appeared in that country peoples with a Semitic language, who founded the cities of Akkad, thus producing the country of Sumer and Akkad, of which so much mention is made in the texts of later times. The first of these Semitic kings to rule the whole of Akkad was the great Sargon, who pushed his conquests far and wide, even to the shores of the Mediterranean, he being the first great conquering king known to history. With these Semitic kings of Akkad there appeared in Babylonia the Egyptian practice of counting years by means of great events that occurred in them; also a technique of sculpture in diorite—a kind of stone not found in Sumer, but for which Magan was famed—as in the case of the famous Stele of the Vultures, and the Stele of Victory made by these Semitic kings of Akkad to celebrate their conquests. All these are admittedly due to Egyptian influence. Therefore the Semites were actually bringing Egyptian culture to Babylonia. It is also certain that the earliest known Babylonian pyramidal buildings, the *ziggurats*, appeared there long after they had been first built in Egypt (10).

It is easy to understand how Egyptian influence could have got to Sumer in the first instance. For it is well known that the Egyptians were sending expeditions to the land of Punt as early as the First Dynasty to get gold, electrum, feathers, ivory, and the resinous substances that they used for ornamentation and for ritual purposes. They constantly sent these expeditions, and they went to Punt in ships down the Red Sea. How early this intercourse began it is impossible at present to say, but of its existence there can be no doubt. The Egyptians were thus influencing countries outside themselves, and it is not expecting too much to assume that men discovered the fertile plains of the Euphrates and Tigris, and settled there to irrigate them as they did in their homeland. The discovery of copper in Elam would likewise lead to the foundation of the settlements at Susa and elsewhere, all of them based on irrigation.

In this way, also, it is probable that the Semites gained their culture. The Egyptians were not only going to Punt, they were also mining copper and turquoise in Sinai. In this way they would inevitably come into contact with the local population, and would in time impart to them some of their culture. This culture would be carried by these Semitic-speaking people into Babylonia, and thus Egyptian culture of a later date than that of the foundation of the earliest Sumerian settlements would make its appearance in Babylonia.

In the pre-Dynastic Age the Egyptians must certainly have gone to Naxos in the Cyclades for emery, for quantities of that substance, which they used for rubbing down hard stones in the fabrication of vases, have been found in their tombs. In this way they would have set going the civilization of the Ægean. While working emery they in all probability discovered the obsidian of Melos, and started to make knives of it for their domestic needs, since their beloved flint was absent. Just as they were forced, while mining in Nubia, to use igneous rocks for implements, so were they forced, in this other place, to use obsidian. In time a great trade in obsidian grew up, and knives of this stone were exported far and wide over the basin of the Mediterranean and further afield.

Another country that must have been influenced by the Egyptians at an early age was Syria, where, just lately, there has been discovered at Byblus, the remains of an Egyptian settlement of about the Third Dynasty (*circ.* 3000 B.C.). The Egyptians got cedar from the Lebanons as early as the First Dynasty, which they rafted down the coast to the mouths of the Nile, and they doubtless mined in Syria and Palestine for copper and lead, and got thence also stores of bitumen. Doubtless this expanding Egyptian influence gave rise to the first food-producing settlements in Crete, the culture of which was exactly similar to that of pre-dynastic times. There was no Palæolithic

Age in Crete, and the food-producing communities must have been those of immigrants from elsewhere.

At the end of the pre-Dynastic and the beginning of the Dynastic Age in Egypt, when such a great impulse was given to the arts and crafts by the invention of the copper chisel, great civilizations sprang up in Elam, Sumer, and Crete. The cases of Elam and Sumer have already been discussed. Fortunately, in the case of Crete, there is hardly any doubt as to the exciting causes. The work of Sir Arthur Evans, the first instalment of which has now appeared in his book on *The Palace of Minos*, makes it patent that the beginning of the Minoan Age in Crete, the age of kings who built great palaces, was contemporaneous with the beginning of the Dynastic Age in Egypt, and that its inception was due directly to Egyptian influence. When discussing the settlements of the early civilization, usually termed *neolithic*, in Asia Minor and Crete, in the light of the great development of Cretan civilization at the beginning of the Minoan Age, he says: "It cannot be gainsaid, indeed, that, as far as can be gathered from the evidence before us, the civilization of the eastern Ægean shores at the close of the Neolithic Age stood at no higher level than that of Crete. It could not give more than it possessed, and we must seek on another side for the quickening spirit which about this time begins to permeate and transform the rude island culture. . . . That the

main impulse came from the Egyptian side can no longer now be doubted" (page 16). He goes on to say that "The proto-Egyptian element in Early Minoan Crete is, in fact, so clearly defined and is so intensive in its nature as almost to suggest something more than such a connexion as might have been brought about by primitive commerce. It may well, indeed, be asked whether, in the times of stress and change that marked the triumph of the dynastic element in the Nile valley, some part of the older population then driven out may not have made an actual settlement on the soil of Crete" (page 17). These words leave very little room to doubt that the Egyptians were directly responsible for the Minoan civilization of Crete.

The Minoan civilization, in its turn, influenced that of Greece. "When it is realized," says Sir Arthur Evans, "how many elements drawn from the Minoan world lived on in that of Hellas the full import of this very ancient indebtedness to Egypt at once becomes apparent. Egyptian influences, hitherto reckoned as rather a secondary incident among late classical experiences, are now seen to lie about the very cradle of our civilization" (page 19).

The indebtedness of Crete to Egypt is the constant theme of Sir Arthur Evans's work. He shows that when Egypt was flourishing, so was Crete; when there was a temporary eclipse in Egypt, so there was in Crete. In no way can it be claimed that the Cretan civilization lived independently of Egypt: it always drew

from Egypt its life blood, and only time will tell the full extent of the indebtedness, not only of Crete, but of the rest of Europe, and indeed of the world, to ancient Egypt.

The conclusion that Egypt was the home of civilization satisfies all the tests. It was a country with much flint, and was tenanted by food-gatherers for untold ages. It contains remains of every stage of the Old Stone Age, and in this respect is unique among the countries round the eastern Mediterranean. The Nile irrigation cycle is perfect, and as the earliest food-producing communities lived by means of irrigation, this country is the most likely to have been the place where irrigation began. The culture of pre-dynastic Egypt is continuous with that of food-gathering times, images of the Great Mother, ivory carvings, bone harpoons and flint implements of Magdalenian forms being found in graves of the food-producing period. The Egyptians surpassed other peoples in their mastery over arts and crafts, this mastery beginning even in the Aurignacian stage of culture. This points to them as being the master people of antiquity, and it agrees well with the fact that so many of the crafts seem either to have been invented by the Egyptians or are first to be detected in Egypt. Again, the culture of pre-dynastic Egypt was far richer than that of any other community of the time. Finally, it is certain that the pre-dynastic Egyptians made large ships capable

of travelling far and wide over the sea, and that these Egyptians were in the habit of sending expeditions to certain places for materials that they desired. No other country can satisfy all these conditions, and few can satisfy more than one. It is therefore to Egypt that all the facts point as the home of civilization, and as the great source of fresh inspiration for many centuries for the surrounding civilizations.

The discussion in this chapter has brought to light two general principles that are worthy of notice. One has already been mentioned in connexion with palæolithic man, namely, that people with an industry necessitating a raw material not readily available everywhere will tend to settle near sources of that raw material. We know what substances the Egyptians were using in pre-dynastic, as well as in dynastic, times, and it is certain that they must, in the first instance, have gone abroad to get these things, taking with them the fundamentals of their civilization, and thus gradually setting up fresh civilizations in outlying spots. That means that the Egyptians, instead of being interested solely in flint, and also in shells of various sorts, came to seek copper, gold, emery, and so forth and to transplant their culture to the places where these things existed. Hence, as the culture of Egypt became more complex, so would her outside connexions increase, and her area of influence would become wider. In time, of course, these

daughter settlements would, in their turn, come to send out new settlements, as, for instance, in the case of Crete, which at a very early age was influencing Syria, Palestine, and Cyprus. But it should follow that, speaking generally, each of these daughter settlements should be near the source of some raw material that was desired by the peoples who founded the settlement. Other factors must, of course, be allowed their scope. For instance, the foundation of Eridu was probably due to the desire to install irrigation systems, while that of Minoan Crete may have been due to political circumstances. But, on the whole, the theorem stands, as will be made apparent in the next chapter.

The other principle, which is also of extreme importance in the study of the growth and spread of culture, is that of cultural degradation. It is too often assumed that advance is the normal process in the development of civilization, that it is natural and inevitable for communities to elaborate for themselves a definite culture. On the contrary, nothing is rarer, in the history of the world, than invention. Think of the number of communities of food-gatherers who have lived for untold ages without making any advance towards food-production. Think of the vast time during which palæolithic man lived without discovering agriculture or the domestication of animals. When these two facts have been properly realized it will no longer lightly be said that culture has developed independently in all parts of the earth. Noth-

ing is further from the truth. On the contrary, as is evident to any candid observer, the transmission of culture from one place to another is invariably accompanied by degradation (11). Mycenæan Greece derived its culture from Crete, but it never reached the cultural heights of Crete, and so on for a multitude of examples. This is but natural when thought is devoted to the matter. The invention of a new element of culture is usually a complicated process. Conditions in a particular place, and at a particular time, are suitable, and the step is taken. The element has, as it were, grown out of its cultural environment, and thrives in it. Transplantation involves dislocation, the proper workmen are not there, they have not the required knowledge and skill, and the product is inferior. Even in the country of origin the product is not always maintained at the original high level. The Egyptians only made their wonderful stone vases for a few centuries: the craft was destined to disappear. Painted pottery in Susa soon degraded and finally disappeared. It is found in many cases that a new development rapidly reaches its summit of perfection, and then, either in its homeland, or when transplanted, it soon decays and finally disappears or is profoundly modified by some fresh development. Even pottery-making can die out, as can be seen in North America and Oceania, among other places. No art or craft is really enduring.

CHAPTER IV

THE OPENING-UP OF EUROPE

WHILE the events recorded in the last chapter were happening, the rest of the world, outside the Ancient East, and those adjoining regions that were influenced by the peoples of the Ancient East as they went abroad on their search for commodities, lay in a profound cultural slumber. But this condition of things was not allowed to last. For, as time went on and the culture of Egypt became increasingly complex, the influence of this country became more and more potent, until ultimately it spread across the world in a great wave that ultimately landed on the shores of America, and originated the civilizations of the Maya in Guatemala and Honduras, as well as those of Peru, of Costa Rica, and elsewhere. The story told in the last chapter, in which the civilizations of Crete, Sumer, and Elam seemed to have developed about the time of the First Dynasty in Egypt, just after the invention of the copper chisel, is but the prelude to a tremendous drama, in which civilizations arise in all parts of the world, have their day, and often, but not always, decay and disappear. The chief incidents of that drama will be described in the following chapters.

After the inauguration of the Dynastic Age in Egypt (the country previously, it seems, having been divided into Upper and Lower Egypt,) a great development in thought took place, which had great consequences. The Egyptians conceived of the idea of the immortality of the body and of the soul, the two ideas being closely associated, and this had a great stimulating effect on their ritual, both funerary and of the temple. It caused the rulers to expend vast sums of material and of energy on the building of great tombs, and on the upkeep of temples with their attendant troops of priests.

It is clear that the minds of the ruling classes of the early dynasties must have been intensely occupied with ideas concerning death, far more than the rulers of Crete, Sumer, and elsewhere. The civilization of Egypt in early dynastic times differed from those of Crete and Sumer. For, while its existing monuments are mainly tombs, no traces whatever having been found of dwelling places, the early Sumerians and Cretans have left behind them great palaces in which dwelt their kings, Crete being especially remarkable in this respect. The palaces of the kings of the Early Minoan Age, which lasted from the First to the Eleventh Dynasty in Egypt, had complete drainage systems, baths, and other modern conveniences. Part of the palace was devoted to ritual and ceremonial purposes and the rest consisted of the living quarters of the royal household. Moreover,

the richer people themselves lived in elaborate houses, of which representations have been discovered revealing how essentially "modern" were these ancient folk (1). Their daily life is far more easily to be appreciated by us than that of the Egyptians, who have left us so few traces of what they did from day to day in those early times.

The difference of outlook between the Egyptians and the Cretans is especially shown in burial customs. The Egyptians invented the practice of mummification about the time of the First Dynasty, and by the Third Dynasty it had become well established (2). Along with mummification went the elaboration of a definite belief in a life after death, in which the dead, as the result of the offices of the living, enjoyed an existence like that on earth—a life of infinite felicity in the Isles of the Blest. This is quite different from the idea held throughout history in Babylonia, where the dead went after death to the gloomy underworld, and there were sunk in a deep sleep. What ideas were held in Crete we do not know, but presumably they were of the same order as those held by the Babylonians, since Minos, the legendary King of Crete, was king of the underworld of the Greeks.

During the early dynasties the Egyptians were sending out expedition after expedition to the land of Punt, to Syria, and, we may be sure, to other countries, in search of substances that they had come to value, either because of their use in

and more elaborate, until they developed into regular underground houses with sets of rooms furnished for the use of the deceased. When mummification was invented, in the First Dynasty or thereabouts, the form of grave altered, and what is known as the mastaba came into existence. In the mastaba grave the tomb itself is underground, often cut in the solid rock. Above ground is a chapel for the performance of ritual ceremonies, and a chamber that contains the portrait statue of the deceased, the making of this portrait statue being part of the process of mummification of the deceased, as has been explained by Elliot Smith in his works already mentioned.

Mastabas were made of brick until the end of the Second Dynasty, after which they were made of stone. Large blocks were used for the building of these monuments, which mark the beginning of what is termed megalithic architecture. Nothing approaching the mastaba style of architecture appears in the countries where a civilization had already been well established by the time of the Third Dynasty (*circ.* 3000 B.C.): they are unknown, for instance, in Crete and Babylonia. Indeed, stone was never used in Babylonia, except, curiously enough, in the first Sumerian settlement at Eridu. But, on the outskirts of this old civilization, in the Sudan, in Syria and Palestine, in South Italy, in many parts of North Africa, Spain and Portugal, France, Britain, Holland, Denmark, North Germany, and in a few other spots in

64 THE GROWTH OF CIVILIZATION

Europe, and in countries round the Mediterranean, as well as in certain outlying parts of the earth, there appeared, along with other signs of culture derived from the region of the Ancient East, and primarily from Egypt, monuments of large stones that reproduce faithfully the essential features of the mastaba graves of the early dynastic times in Egypt (4). These monuments are therefore exactly where they should be if they were the result of an influence setting out from Egypt.

The most widely distributed of the monuments referred to are the dolmens. Sometimes a dolmen is covered with a mound of earth, always elongated, and with its axis pointing east and west, and then this monument is called a "Long Barrow." There seem to be two distinct types of dolmens. One consists of a large, flat stone supported by three or more other large stones standing on their edges so as to enclose a space, the large stone often projecting in front so as to form a kind of forecourt or ante-chapel. In the other type of dolmen the chamber is approached by a long gallery formed of rows of large stones set on edge. These two forms of dolmen seem to copy the parts of the mastaba tomb that are above ground and below ground respectively. The essential feature of the visible part of the mastaba grave is the ante-chapel and the chamber in which the portrait statue is placed. Communication between these two chambers is effected by means of a small hole in the wall

of the chamber containing the portrait statue. This feature is often reproduced in dolmens in France, the Caucasus, India, and so forth. The underground part of the mastaba, on the other hand, consists of a chamber of large blocks of stone, or else a chamber carved in the rock, approached by a passage, itself lined with large blocks of stone. This form of tomb is exactly similar to one variety of dolmen. Further, it is found that the practice of making rock-cut tombs is associated with the erection of dolmens. These rock-cut tombs, some of which are to be found in France, are of the same ground-plan as the underground part of some of the mastaba tombs.

These megalithic monuments appeared in Europe in company with the earliest signs of the presence there of food-producing peoples. In Italy, Spain and Portugal, and in southern France they are definitely associated with copper implements of exactly similar types to those made in Egypt and elsewhere in the Ancient East. Further north, as in Brittany and in Great Britain, signs of the use of metal are not so prominent. Indeed, many assert that these great monuments were erected by men who were ignorant of the use of metals, by tribes that were in the pastoral stage of culture, which, they assume, is something that came before agriculture, an assumption which, as will be shown later, is entirely devoid of any support.

The evidence suggests strongly that the

building of megalithic monuments was certainly the work of men who knew all about metals, who, for some reason or other, have left behind them but few traces of this practice in the more outlying regions.

It is interesting to try to form an opinion as to the identity of the builders of the Long Barrows that are found in various parts of this country. One at West Kennet, in Wiltshire, in the midst of an important part of the country in those days, as may be seen from Sketch Map No. 5, was originally about 336 feet long, 75 feet broad, and 8 feet high. It contains a chamber of large blocks of stone, approached by a corridor, also made of large blocks.

Who could have built so immense a monument in those remote times? When we remember that ordinary people in Egypt, throughout the ages, were buried in small graves dug in the sand, with but little ceremony, and that tombs of large stones were reserved for the ruling class—when it is remembered, further, that nobles invariably led Egyptian expeditions—it would seem plausible to conclude that this immense grave was possibly the tomb of an Egyptian noble who was in charge of operations in this country. Recently Mr. O. G. S. Crawford, the lately appointed Archæological Officer to the Ordnance Survey, has, in an interesting monograph on Long Barrows, published by the Ordnance Survey, maintained that the Long Barrows of England certainly are derived from the Egyptian mastaba

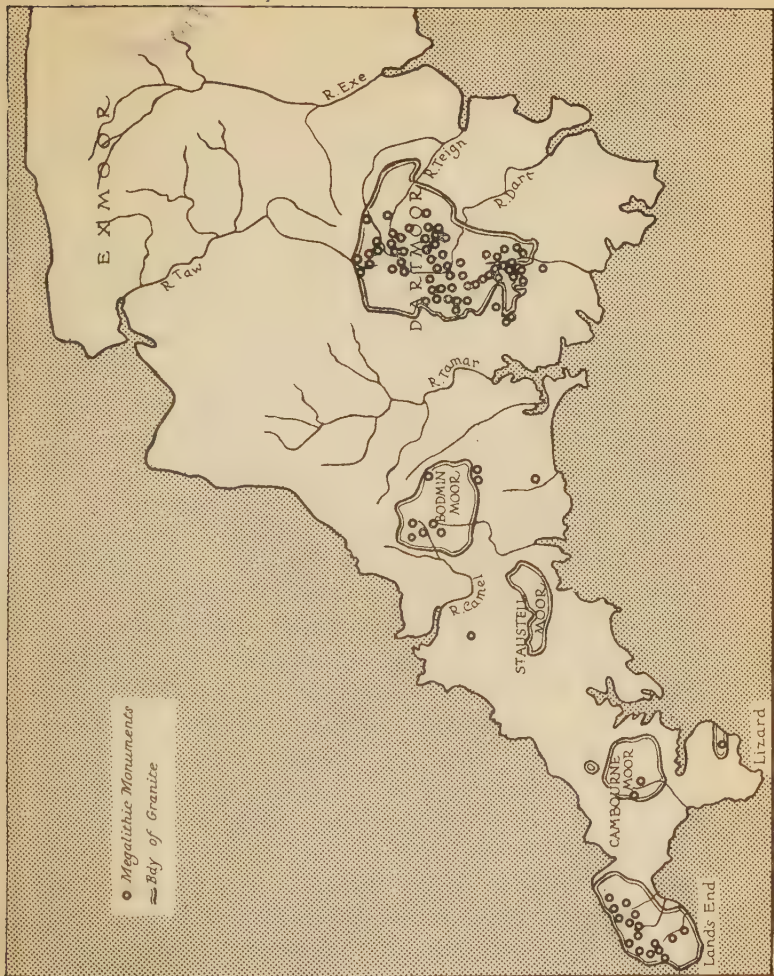
type of grave. He says that in one instance it was found that the part of the barrow corresponding to the forecourt of the Egyptian mastaba contained bones of animals. Evidently animal sacrifices had been performed there to provide the dead with food, just as was the case in the Egyptian funerary ritual. Moreover, the actual burial chambers contained holes, just as in the case of the Egyptian mastaba. That being so, it is evident that the Long Barrow has some very close connexion with Egypt: either it was the tomb of an Egyptian noble, or else it was the tomb of a member of a ruling group established by an Egyptian noble somewhere in western Europe, perhaps in England itself. One of these two explanations must certainly be correct.

Before proceeding to the more general question of the spread throughout the world of Egyptian culture of the early dynasties it will be well to pause for a while and to consider the evidence that the builders of megalithic monuments in Britain were possessed of a knowledge of metals. This evidence serves to throw much light on the problem of human settlement (5).

The three Sketch Maps Nos. 4, 5, and 6 are intended to illustrate the argument. The first is concerned with Devon and Cornwall. It shows the distribution of dolmens, kistvæns (degenerate dolmens), and stone circles (also a very common type of megalithic monument). It also shows the areas occupied by the granite

formation in the two counties. This map is compiled from those in the volumes of the *Victoria County History*. It will be seen that, with the exception of two or three cases, all these monuments are situated on the granite formation, surely a very remarkable fact. Why should men choose to settle in such places? As a matter of fact, they did not settle on every patch of granite, for they somehow or other missed out St. Austell Moor. It is said that the builders of these monuments liked to settle above the height of 500 feet; but if that be so, why have they entirely avoided Exmoor, surely a most suitable place for men who liked the open moorland? That explanation does not seem adequate. It is said also that these men were trading, that they went along certain trade routes, and were buried in graves along those routes. Anyone holding to that view will have some difficulty in explaining the map, with its definite localization of monuments in certain places; for the fact is that not only do these granite areas contain monuments which are obviously funerary, but actual dwelling places are known, hut circles, consisting of huts of stone, being plentiful on Dartmoor and in the Land's End region. No, these places were actually occupied, and evidently for some very good reason.

Dartmoor, Bodmin Moor, Cambourne Moor, and the Land's End district are well known for one thing, namely, their mining industries. For many hundreds of years these areas have



NO. 4. MEGALITHIC MONUMENTS OF DEVON AND CORNWALL.



yielded much tin and copper. What is more, there are good reasons for believing that, formerly, Dartmoor and the other granite regions must have been very rich in gold, for that metal is still found in streams running out of the granite. In Devon and Cornwall the granite is the sole source of gold and tin, neither of these metals being found away from it.

The inference now is obvious. We have in Britain monuments similar in type to the graves of Egyptian nobles of early dynastic times: Egyptian nobles invariably led expeditions to other countries for gold and other precious substances: the builders of megalithic monuments certainly knew of gold and copper in Spain and Portugal and in southern France, and it is doubtful whether anyone is hardy enough to disclaim any connexion between them and the builders of the British megaliths; moreover, the beehive huts made by the settlers on Dartmoor are exactly similar to the dwellings of Egyptian miners of the early dynasties in the Sinaitic Peninsula; and stone circles are also found in both places. Since the Egyptians were, in those times, using great quantities of gold and copper, it is only logical to conclude that the builders of the megalithic monuments in Devon and Cornwall were occupied in exploiting the stores of gold and copper, and perhaps also of tin, which they contained, and that the miners, if they were not Egyptians, were men in very close touch with them.

A good exception is an excellent proof of a rule. I have mentioned already that St. Austell Moor is devoid of megalithic monuments. It would have been easy to have put forward some facile explanation to account for this fact. But such a policy is dangerous. The explanation is there, and it will some day be forthcoming, if we are patient. In the case of St. Austell Moor there is a very good reason for the absence of megalithic monuments. This district is now the one that yields most tin of all the Cornish mining districts, and for the past hundred years it has been extensively exploited. Therefore the tin was there for the men of old to exploit. Why did they not proceed to work it? When I put this difficulty, a few years ago, to Mr. J. Wilfrid Jackson, Assistant Keeper of the Geological Department of the Manchester Museum, he told me that in all probability the tin lodes were masked by the kaolin clay that is so abundant on St. Austell Moor. Kaolin is used extensively in the manufacture of china and other things, and it comes entirely from St. Austell Moor.

In the Memoir of the Geological Survey dealing with this district there is a small map showing the distribution of the kaolin deposits and of the tin lodes. In practically every case the tin lode is masked by a great deposit of kaolin, sometimes as much as thirty feet deep. Obviously, therefore, the old miners were not going to bother about St. Austell Moor when they could get plenty of gold and tin on Dart-

moor. The trouble of clearing away the great superposed deposits of kaolin would be too great. The case of St. Austell Moor can, it seems to me, only be explained on this hypothesis.

So it would seem that we must picture the megalith builders, whether Egyptians or their pupils, sailing from Brittany, or northern Spain, and discovering a new El Dorado in Cornwall and Devon, and thus opening-up Britain for the first time. As the ages passed these men were followed by others. The part played by the Phœnicians in this enterprise has yet to be decided, and more will be said of them shortly.

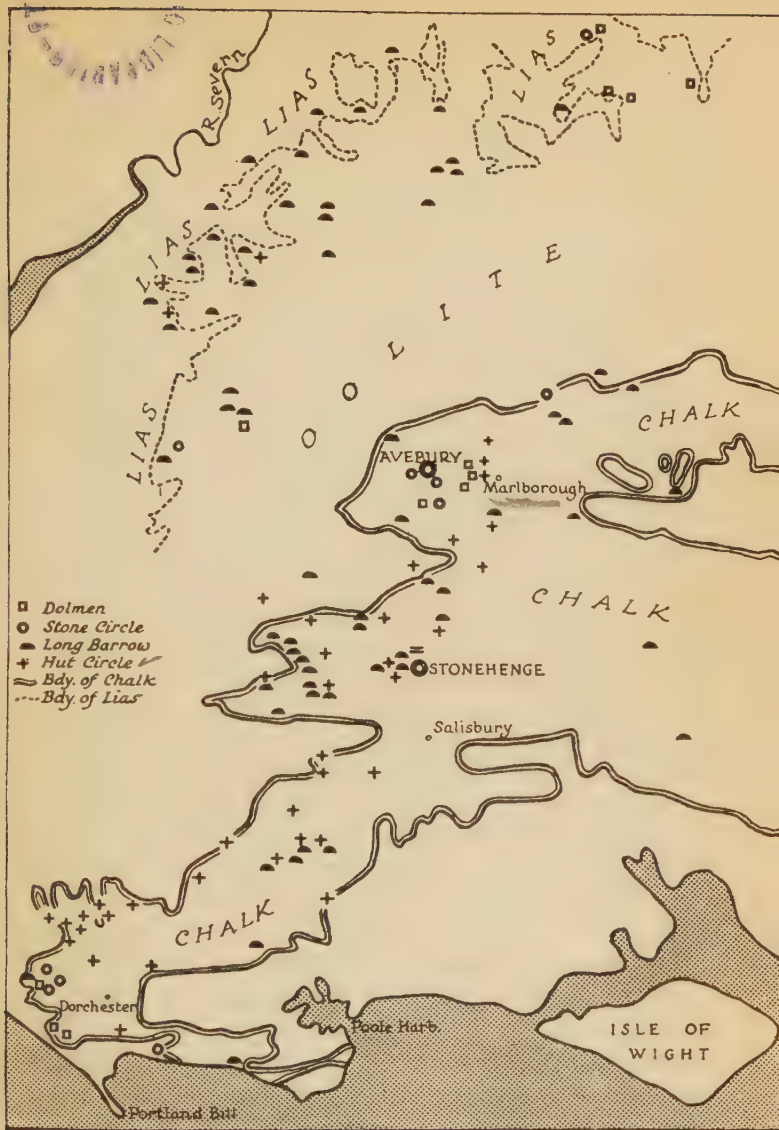
These ancient miners did not confine their attention to Devon and Cornwall. They were exploiting the lead of Derbyshire; for, as the map shows clearly, their long barrows and stone circles are closely associated with lead mines. You may go for many miles in all directions from the region of Derbyshire, where is the carboniferous limestone that yields lead, and you will find no megalithic monuments nor lead mines. The association of these monuments with mines is sure proof of the activities of their builders. The Egyptians used lead and galena even so early as the pre-Dynastic Age, so, since lead ore does not exist in a natural state in that country, the presence of tombs derived from Egyptian models near ancient lead mines need cause us no surprise.

In other parts of Britain and Ireland there

72 THE GROWTH OF CIVILIZATION

is a great mass of evidence to support the view that the first food-producing people were engaged in the exploitation of the mineral resources of the country, their settlements being, for the most part, situated near gold, tin, lead, and copper mines; in some instances they even were working iron mines for hæmatite, which they used as a pigment.

If a survey be made of the materials used by the builders of megaliths in England and Wales, as well as in other countries, it is evident that, in addition to the mining of metals, which they exported to other countries, these people were using for their ornamentation and for their domestic industries, while living in the country itself, substances such as jet, amber, ochre, graphite; and so forth, that they made implements of flint and of various hard rocks, such as granite, diorite, and hornblende. These all had to be sought out and circulated. So, in the course of time, a considerable degree of intercourse must have arisen in this country itself, and "trade routes" must have come into existence, by which men moved from one settlement to another. Thus jet, amber, as well as gold, have been found in the barrows of Wiltshire, far from their sources in nature. So, in addition to the chief movement of culture out from the Ancient East, which was responsible for the first settlements in western Europe, there soon arose smaller movements connected with articles of everyday use. The Egyptians, or their pupils, may have come to



Britain on the gold hunt; they may have settled in Scandinavia on account of its stores of amber; but once settlements were made in these and other countries they would begin to live their own lives, and would in their turn form daughter settlements.

The most important instance of a secondary movement of culture known to me is that responsible for the thick population of Wiltshire and Dorset in those far-off days, the region that contains Avebury and Stonehenge, two of the largest megalithic monuments in these islands. The probable extent of this population may be gauged from Sketch Map No. 5. The reason for this thick settlement is of so homely a nature that it escaped me for some years, until the dire necessity of accounting for it would no longer brook delay. It was only when I realized that this area was full of flint workshops that the truth lay revealed. All through England and Wales flint implements were used by the megalith builders. These must have been derived from the parts of the country that yield flint, and the region depicted on the map constitutes a considerable part of this area. Throughout the chalk formation, where flints were originally formed, at Brandon in Suffolk, at Grimes' Graves in the same county, at Cissbury in Sussex, there are considerable flint mines, evincing a considerable degree of skill on the part of those who opened them up. These mines, together with the workshops of Dorset and Wilts, doubtless

74 THE GROWTH OF CIVILIZATION

supplied the rest of the country with flint implements. Even the solitary dolmen of Kit's Coty in Kent is close to an important flint quarry. The most homely and the most useful raw material used in those days was therefore responsible for a great concentration of population. Sketch Map No. 5 shows how the remains left behind by these people almost invariably stop short of the chalk boundary, and but rarely are found on the oolite formation, or on formations later than the chalk.

The great concentration of population on the chalk in those early days shows that civilization had not yet emancipated itself from the chalk. As in the Old Stone Age, the chalk formation was chosen presumably because of its stores of flint. Men had elaborated new needs that took them on to new geological formations, and led them across the sea to new lands, but they were still, in this case, attached to the chalk, with its stores of flint, just as we are to-day greatly attracted to coal-bearing areas. Any industrial civilization is mainly centred round its sources of raw material, and the builders of megaliths seem to have been no exception to the rule.

In one case it is not yet possible to provide a complete solution to the problem, and it is well to take careful note of this exception. On Sketch Map No. 5 it will be seen that many long barrows are closely associated with the lias formation. We do not yet quite know the reason for this. These people used hæmatite



NO. 6. MEGALITHIC MONUMENTS OF DERBYSHIRE

as a pigment, they used ochres, ruddle, and iron pyrites for various purposes, all of which substances occur in this formation. It may therefore be that the settlement on the lias boundary was due to the presence of such raw materials. Future investigation will clear up this mystery.

Much evidence could be adduced from other parts of Europe to show that the builders of megaliths were determined in their occupation of any country by the presence of desired substances. One of the best-marked instances of this sort is that of the Baltic, where the settlements of the megalith builders are so strictly confined to the amber-producing regions that there can be little doubt as to their intentions. In France, Spain, and Portugal the distribution of megaliths, although not yet fully worked out, appears to conform to the same principle.

The men who erected these monuments were but the forerunners of others from the eastern Mediterranean. The Cretans themselves trafficked with the countries to the west. In south-eastern Spain, for instance, ample traces have been found of early intercourse with the Ægean, the object of which undoubtedly was the exploitation of the mineral wealth of the Spanish Peninsula.

Fascinating as are these matters, they must now be left on one side, and attention directed to the rest of the activities of Egypt, the mainspring of the movement.

CHAPTER V

THE ARCHAIC CIVILIZATION AND ITS SPREAD

THE movement of culture out from the eastern Mediterranean, and primarily from Egypt, to western Europe that has just briefly been described is only part of a world-wide process to which attention must now be paid.

It can be shown that the first food-producing communities in all parts of the world outside the area of the Ancient East, especially those that could be reached by sea, possessed a culture so similar to that of Egypt in the Pyramid Age that little doubt can exist as to their mode of origin. Part of this wave of cultural influence was that which brought the builders of megalithic monuments to the shores of Britain. This movement also took builders of megalithic monuments to the coasts of America, but in their case signs exist of a later date of derivation from Egypt, or, perhaps more strictly speaking, a different mode of derivation. At the same time no reasonable doubt can exist as to the cultural relationship of this far-flung line of settlements, or the common aims of builders of megaliths the wide world over.

In order to understand the significance of

1018-8-1

this great world-wide movement of culture, some attention must first be paid to the development of Egyptian culture during the first six dynasties. The first thing to be noted is that event which gave to the Egyptian social and political constitution an impress which has always distinguished it from other early civilizations of the Ancient East. Prior to the foundation of the First Dynasty Egypt consisted, it seems, of two entirely distinct kingdoms—Upper Egypt and Lower Egypt. The First Dynasty marked the consolidation of the two countries, and the Egyptians never forgot the fact that their country was a duality in unity. The king was always known as the King of Upper and Lower Egypt; he was under the protection of the goddesses of both Upper and Lower Egypt; his palace was double, so were his treasuries; his coronation ceremony was dual, for he was crowned separately King of Upper and of Lower Egypt; his crown was dual, as were his regalia in general; the high priests of each of the two temples of Memphis and Heliopolis were two in number; and in many ways it was evident that the Egyptians looked on their kingdom as a dual affair. This even went so far as the use of libation vessels with double spouts, that could pour out libations simultaneously for both parts of the country. The art of Egypt was profoundly influenced by the duality of the political organization: for heraldically opposed animals, that are so frequently depicted in Egyptian art, are doubt-

less representative of the duality of Egypt. A splendid instance of this duality is seen in a late painting on the end of a chest found in the newly discovered tomb of Tutankhamen of the Eighteenth Dynasty, where the king himself is represented as two human-headed lions, heraldically opposed. This form of art has been carried all over the world, and it is a lasting sign of the ancient duality of Egypt.

The adoption, by the civilizations of Elam, Sumer, and Crete, of a like form of ornamentation, where two animals are heraldically opposed, is yet another sign of Egyptian influence in these places; for this form of ornamentation is at home in Egypt, and has direct reference to the political constitution of the country, which is not, so far as is known, the case in these other places.

This distinctive duality of political, social, and economic organization is an index of Egyptian influence the importance of which can hardly be overrated. For, from India to America, the texture of early society was shot through and through with ideas of duality, and the more we get to learn about these early societies the closer becomes the similarity. Indeed, the dual organization of society is so arbitrary a form of organization that it alone, when discovered in some outlying part of the world, would be sufficient witness of the existence of Egyptian influence.

To turn to other elements of culture, the mastaba type of grave, used by the kings and

nobles of the first two dynasties, did not remain long as the royal tomb. Although the nobles continued for many dynasties to be buried in mastabas, the kings, from the beginning of the Third Dynasty onwards, built pyramids for their graves. The coming of the pyramid marks one of the great epochs of human history. The earliest king to build a pyramidal form of tomb was Zoser, the first king of the Third Dynasty. He built a large stone mastaba, in which he doubtless intended to be buried. Then, for some reason or other, he decided to build another on top of that, and then another, till he finally had made what is called a "stepped pyramid" consisting of six mastabas placed one on top of the other, each mastaba being smaller than that beneath it. This is the first large monument of stone known to history. The next royal tomb was a pyramid with smooth sides, and for some dynasties the kings were buried in pyramids. The largest were made in the Fourth Dynasty, which marks the culminating point of the Pyramid Age.

It is probable that the coming of the pyramid means more than the mere adoption of a new form of tomb. It is the outward and visible sign of a movement that was fraught with tremendous consequences for mankind. This movement culminated, at the beginning of the Fifth Dynasty, in the coming to power of the *Children of the Sun*, a line of kings connected with Heliopolis, the centre of Egyptian sun-cult. There are signs that the Heliopolitan

priests were influencing Egyptian affairs before they gained the throne. For although no mention is made of the sun-god Re, the great god of Heliopolis, in the royal pronouncements of the first four dynasties, yet some of the kings, especially in the Third and Fourth Dynasties, when pyramid-making was in full swing, had their names compounded partly of that of Re. Moreover, the texts in the pyramids of the Fifth and Sixth Dynasties—none earlier are known—contain numerous references to the sun-god and his cycle of deities, while references to the sun-god are entirely lacking in any mastaba tomb; that is to say, so far as we can see, the coming into existence of pyramids meant a complete revolution in the ideas about religion and the future life attained by the ruling group. Perhaps they had become converts to the solar theology of Heliopolis, which promised the delights of life after death with the sun-god in the sky, and many other benefits not to be obtained in any other way. Their conversion seems to have been complete after the Fifth Dynasty, for every king of Egypt was henceforth called *Son of the Sun*. While the royal family had thus come to be associated with the sky, the rest of the community went to the older lands of the dead, which, in later times, were under-ground. So after death the community was divided.

In the Third and Fourth Dynasties the royal capital was at Memphis. In the first two dynasties it had been at Abydos in Upper

Egypt. Memphis was built, on the boundary of Upper and Lower Egypt, as a fortress to help keep the people of the Delta in order ; but it definitely became the capital at the beginning of the Third Dynasty. At the beginning of the Fifth Dynasty, during which the kings began to call themselves the *Children of the Sun*, the capital was still at Memphis. But in this and the succeeding dynasty a curious state of affairs came to pass, one that was spread abroad by Egyptian influence. During the Third and Fourth Dynasties the king had ruled the country, but his office was mainly concerned with the maintenance of the cults of the gods, especially of Osiris, with whom his father had become identified when mummified. The civil administration of the country was carried out by the crown prince, the eldest son of the king, who was the vizier. When he came to the throne he would therefore have a thorough working knowledge of the administration of the State. But when the Heliopolitan Dynasty came into power, at the beginning of the Fifth Dynasty, a change was made in the mode of administration of the State. The crown prince was no longer the vizier, but that office was filled by a member of a noble Memphite family, by a man who usually bore the name of Ptah, the god of Memphis. All through the Fifth and Sixth Dynasties there is no sign whatever of the royal family carrying on the office of vizier. At the end of the Fifth Dynasty, however, it would seem that a close relationship existed

82 THE GROWTH OF CIVILIZATION

between the royal family and that of the vizier ; for in all the cases where information is available the vizier married a royal princess, and, what is more, the king sometimes married into the vizier's family. Such an interchange would serve to consolidate the position of the ruling group, and would tend, perhaps, to prevent strife.

The mode of government of ancient Egypt was in all probability carried out by means of councils. The vizier had a court called a "hall," and it seems that he was assisted in his administration by a council. The country was divided into territorial divisions called "nomes," each ruled over by a governor, who, in the first four dynasties, seems to have been chosen by the king from among his relatives. In the Fifth Dynasty the rulers of the nomes made themselves hereditary, this being part of the weakening of the fabric of the State that came about at the inception of this dynasty. Each nome was distinguished by some sort of emblem—an animal, plant, or material object. Also, there is some reason to believe that each nome, theoretically at least, consisted of groups of relatives.

The condition of Egypt in the Sixth Dynasty, that is, about 2500 B.C., may be summed up roughly as follows. The country consisted of two distinct parts, each divided into a number of territorial divisions ruled over by a hereditary noble, each division distinguished by an emblem. The king was a *Son of the Sun*, an incarnate god, and he carried on the State sun-cult of the sun-god. The civil administration of the

country was presided over by the vizier, usually a member of a family that intermarried with the royal family, and never a member of the royal family. Administration was carried on by councils. The ruling group practised mummification, while the rest of the people were buried in a crouched position. The royal family went after death to the sky, while the rest of the community, including the nobles, went if anywhere, to the land of the dead ruled over by Osiris. The food supply was gained from irrigated fields and from domesticated animals. All the arts and crafts were highly developed.

From at least as early as the First Dynasty the Egyptian kings had been sending expeditions to other countries to get stores of gold, ivory, resinous substances, cedar, and so forth; in fact, they were using a large number of substances that they obviously must have got from somewhere else. In their earliest enterprises they succeeded in establishing civilizations in various places, which civilizations grew up more or less on their own lines and acquired personalities of their own.

Before starting out to describe the great wave of culture that moved eastward to America, I should like to mention a possible result of this enterprise in the Pyramid Age that is of profound importance to all interested in the early history of civilization. The Egyptians for many centuries sent expeditions to the Syrian coast. I do not mean that they traded with the coast, but that they actually went

themselves to get cedar and other things. For there has just lately been discovered the ruins of an Egyptian temple of the times of the Third Dynasty at Byblos, the scene of the death of Adonis, the story of whom has such close connexion with that of Osiris. The connexion is very intimate, for Osiris, the king of Egypt who was killed by Set, and put in a box which floated out to sea, finally landed at Byblos. These facts therefore make it patent that there was a very intimate connexion between Egypt and Byblos. The Adonis legend belongs to the Phœnicians, who in later times were living on the Syrian coast. The Phœnicians themselves claimed to have come from the Bahrein Islands, in the Persian Gulf, the seat of an important pearl fishery; and their physical type (so Professor Elliot Smith informs me) is such as probably arose in that region as the result of admixture between Armenoid and Mediterranean stocks (2).

The culture of the Phœnicians, and of the Carthaginians, their descendants, was so like that of Egypt of the Pyramid Age, when the Egyptians were actually settled on the Syrian coast, that all doubts as to the origin of the culture of these people may be laid at rest. The Phœnicians had dual divisions of towns. Tyre and Sidon, for instance, while probably forming a dual grouping, with hostility between them, as is constant in the dual organization throughout the world, each consisted of two parts, a seaward and a landward part, the seaward

part being situated on an island off the coast. Carthage had the same formation.

In addition to displaying, in their culture, so great similarities to Egypt, the Phœnicians were in close touch with that country, for which they largely acted as carriers. The activities of the Phœnicians as traffickers can readily be appreciated by a perusal of the twenty-seventh chapter of Ezekiel, one of the most remarkable books of the Old Testament, which certainly serves to give a clear idea of the prestige of the Phœnicians in those days. They, therefore, were carrying on the old traditions of the Egyptians, and were constantly sending out expeditions to get precious substances, and, as we know, planting their own peculiar culture wherever they made colonies. They thus constitute an excellent example of the outward expansion of Egyptian culture as the result of Egyptian expeditions to the Syrian coast (3).

The question of the Phœnicians brings up another serious matter for consideration. A trade route runs down from Tyre, on the Syrian coast, to Safed, situated north-west of the Sea of Galilee, and in the midst of a country famed for its richness in bitumen, and containing, also, mines of lead and copper. This district presents, moreover, fields of dolmens, which testify to a considerable activity in the past of the builders of megalithic monuments. These men installed irrigation systems, with terraces revetted with stone running up the sides of the hills; they made round watch-

towers like those found in Sinai near the Egyptian mines, in Sardinia, Peru, and Britain; they also lived in beehive stone huts, as in Sinai and Britain; and their settlements were also protected by means of megalithic fortresses, just as occur in the Egyptian mines of Sinai and in our country (4). Since Tyre was in such close contact with this region, is it possible that the Phœnicians acquired thence, or perhaps from the Egyptians themselves, the custom of erecting megalithic monuments? Was, in fact, Phœnicia, so closely bound up with Egyptian influence, the focus of the megalithic culture of western Europe? It is quite possible that this is the case. But whether it be so or not there is no doubt that the greatest trafficking nation of antiquity was nothing more or less, culturally speaking, than a child of Egypt.

When we turn to think of the effects of Egyptian intercourse towards the East an extraordinary tale unfolds itself. Of course, the first chapters are vague, but they can be conjectured with fair certainty. We have to realize that, from the time of the First Dynasty at least, the Egyptian kings were sending constantly to the land of Punt, to southern Arabia, for gold, resins, feathers, ivory, and other precious substances. From the time of the First Dynasty to that of the Sixth Dynasty in Egypt, a period of six hundred years at least, traffic had proceeded down the Red Sea by ships the object of which was exploitation. Is it likely that during this vast time, no attempt

had been made to work round the coast of Arabia, up the shores of the Persian Gulf, and so on to India, where, on the Malabar coast, would be found vast stores of pearls, gold, and all manner of precious things? This traffic can easily account for the foundation of the civilization of Sumer, and, in later times, for that of India. It is significant that the great ruling family of ancient India, the Children of the Sun, should have originated in the valley of the Indus, at the most westerly point of India. The fact that so many Indian boats show patent signs of derivation from Egyptian models of the Pyramid Age is, in itself, strong confirmation of a point of view which, after all, is only founded on common sense and an ordinary knowledge of man's habits.

An activity that persisted for many hundreds of years must have had extremely complicated effects. We should, therefore, not expect to find that Egyptian influence in the East was of a uniform nature. According to the changes in the culture of that country, so would be the external influence. The Egyptians and their pupils may have sent out several expeditions, which would have produced vastly different results. For instance, Dr. C. E. Fox has lately discovered, in San Cristoval of the Solomons, a culture so distinctly Egyptian, and Egyptian of the Pyramid Age, that the effect is simply astounding. In fact it was this discovery that led the late Dr. Rivers to agree definitely with Elliot Smith's conviction of the predominance

of Egypt in the cultural history of the world. The ruling class of certain parts of San Cristoval make mastaba tombs of definite Egyptian type, with a vertical shaft, at the bottom of which they place the mummified remains of their dead. This type of tomb only appeared in the Pyramid Age in Egypt, and its evolution was the result of certain peculiar events in that country. The people who use these tombs also place on top of the mastaba a dolmen, under which they place a portrait statue with a pigtail, a form of statue that is certainly Egyptian and of the Pyramid Age. Many of their beliefs and customs likewise hark back to the Pyramid Age in Egypt. So, therefore, somehow or other, men who seemingly were Egyptians got into the Solomons at some remote age, probably in the Pyramid Age itself, and there founded a civilization. How did they get there? So far as is known at present there are no traces of such mastaba tombs or of like portrait statues between the two countries. Are we to believe, therefore, that these men were actually Egyptians of the Pyramid Age who were wrecked on this island, who settled down to make the best of things? What other construction are we to put on these facts?

On the other hand, Elliot Smith definitely states that the technique of mummification of the Torres Straits is that of the Twenty-first Dynasty; that these people practised a technique that took the Egyptians many centuries to elaborate. This suggests intercourse at a

much later date. So, in thinking of the cultural history of regions like the Pacific we must be prepared to keep our minds open for any developments. We must remember that the ancients had large ships, which enabled them to travel large distances. Even the Polynesians had boats that would take two hundred people on board, and on ships of that size you can go anywhere. These boats would be far larger than those in which the first navigators crossed the Atlantic.

In thousands of years of intercourse much can happen. One of the most fascinating problems that has been raised by investigations such as those described in this book is that of the plant termed *taro* in the Pacific (*Colocasia antiquorum*). This was the most ancient food-plant in the East Indian Archipelago and the Pacific, for it was used in the East Indian Archipelago long before the introduction of rice. It was used by the first food-producing communities of Indonesia and Oceania as a staple form of food, and it still is widely used. This plant belongs to India. What, therefore, are we to say when we find its use widespread in Africa, in Egypt, Uganda, West Africa, in countries far removed from its homeland? The only reasonable explanation is that the early voyagers brought it home with them to Egypt and elsewhere, just as Raleigh brought back the potato from Peru. Such an instance as this serves to throw a flood of light on early intercourse between widely separated regions of the world.

As a result of this early intercourse there

came into being a chain of communities from India to America, all possessing cultures strikingly similar, in all essentials, to that of Egypt of the Pyramid Age. In order to facilitate discussion I have called this early world-wide civilization the *Archaic Civilization*.

Beginning at the West, and working eastwards, the first country to be considered is India, where there are numerous dolmens and stone circles, as well as rock-cut tombs reminiscent of those found in Europe, Syria, and elsewhere. The builders of these monuments were able men. They thought little of transporting stones weighing hundreds of tons over several miles of difficult country, in order to form a cap-stone for their dolmens. They worked gold mines, quarrying out the quartz reef to a depth of six hundred feet, and ground every ounce of the quartz by hand in stone querns, of which they have left multitudes lying about on the ground. These mines are of such vast antiquity that, when Europeans rediscovered them some years ago, and began to open them up, the local natives ridiculed them for their pains. Not even traditions of these activities remain. The ancient gold-miners were the first food-producing people that entered India. They found it tenanted, doubtless, by food-gathering tribes similar to the Veddas of Ceylon and certain jungle tribes of southern India, tribes called pre-Dravidian by scientists. These old treasure-seekers soon found out all the important sites of gold, copper, and so forth, and made

their settlements near these places, installing irrigation systems by which to grow their food. Major Munn, Inspector of Mines to H.M. the Nizam of Hyderabad, says that since 1908 he has invariably found old copper and gold mines associated with megalithic remains, and that he has never found the two apart. Thus there is little doubt what attracted the ancients to India.

The megalith builders in India made one great discovery. They found, lying about on the surface in great quantities, in Hyderabad and elsewhere, iron of such a quality that it practically constituted a natural steel. In fact, it was of this iron that Damascus blades were made. The men of the archaic civilization soon appreciated the value of this iron, and began to make implements of it. That is why we find so many of their settlements, as well as those of the native tribes that have acquired their culture, situated near important sources of iron. In the Salem district, for instance, so noted for its iron, dolmens and stone circles abound. Again—to take for an example a native tribe—the Khasi of Assam, so notable for their megalithic monuments and iron working, have settled in a part of Assam that contains much iron ore. So, instead of confining themselves to formations yielding supplies of gold, copper, and so forth, the peoples of India have also occupied the formations that yield iron. The craft of iron-working was, in time, carried further east, so that we find the peoples of the East Indian Archipelago, which may be

called Indonesia for short, working iron, in Borneo, Celebes, and elsewhere, they having, in the case of Celebes, learned the craft from wonderful strangers who built megalithic monuments, and therefore belonged to the archaic civilization.

Inquiry into the political and social organization of Indian peoples shows that the nearer we go back to beginnings the clearer does it become that the old social order was based on a dual organization like that of Egypt. For instance, the country ruled over by the Nayars of the Malabar coast, a region possessing rock-cut tombs of obvious Egyptian design, dolmens, and many old mining sites, is divided into two parts, north and south, each connected with a distinct colour, and each consisting of a number of territorial divisions. One part of the country, the northern, is considered to be superior to the other. Moreover, the followers of the Nayar chiefs were formerly divided into two groups, hostile to each other.

This feature of the bisection of the population into two hostile divisions is very wide in South India, and doubtless further inquiry would find that it is very deep-seated. We find for instance, that in Mysore the castes are divided into two hostile groups, and that faction fights are common. In certain places each group has its own special meeting-place, or entrance to the common meeting-place. This duality of society in India is also found in Assam, among existing tribes such as the Abor and the Naga, and in the old kingdoms like that

of the Ahom ; but here, as elsewhere, the system is in ruins.

India is of peculiar importance in the study of movements of early culture, for it was the original home to which Polynesian tradition harks back. In South India the caste of the Paravas, the pearl-fishers of the Gulf of Manaar, is composed of folk of pure Polynesian type, who, together with their fellow-castes, like the Pariahs, belong to the dual grouping of society. The importance of these Polynesian pearl-fishers lies in the fact that, on every pearl-bed from Ceylon to the shores of America, and, again, in America itself, there are distinct traces of a form of civilization closely akin to that of Egypt in the Pyramid Age. The ancestors of the Polynesians were the carriers of this archaic civilization into the Pacific. The Polynesians are also of great interest in one more important particular—they are partly of the same physical type as the Phœnicians, who were, as Elliot Smith claims, formed of a mixture of peoples in the Persian Gulf, again the seat of an important pearl-fishery. These facts make it possible to imagine the nature of the spread of civilization to the East. It went by sea from pearl-bed to pearl-bed, until it reached America, and there, again, it spread over the widespread pearl-beds of the American continent. In certain instances, of course, it struck inland, and settlements were found, as in India, in mining regions.

The carriers of this archaic civilization started

from India, and went out by way of Indonesia to the Pacific, leaving behind them traces that still are to be detected. Thus, in the Malay Peninsula and in Burma polished stone implements, identical in type with those left behind by the old builders of megaliths in western Europe, India, and elsewhere, have been discovered in old gold and tin workings, and especially in the immense gold mines of the province of Pahang of the Malay Peninsula. These implements are typical of the archaic civilization from one end of the world to the other, their range being from Ireland, right across the Pacific to the eastern United States. When I say that they are typical, I mean that they were only made by the first food-gathering peoples of India, Indonesia, Polynesia, and so on; that the later peoples failed to make them, and simply regard them as magical, as "thunder teeth," and use them in their magical practice, as I have shown in *The Children of the Sun* and in *The Origin of Magic and Religion*. Wherever these implements are found it can be certain that we are very near to the archaic civilization. Polished stone implements have also been found in parts of Sumatra, where there are old gold workings; again in Java, which island possesses dolmens and stone images of Polynesian type. Thus, in spite of the fact that Hindu and other later influences, such as the Mohammedan, have swept across parts of Indonesia, there still remain ample traces of the archaic civilization. But in places such as

Celebes and the surrounding islands, and in the Moluccas, where there are many pearl-beds, the old order has not been entirely swept away. We still find, in certain places near sources of pearls, gold, and so forth, ample traces of the archaic civilization. Sometimes, as in Timor and Celebes, the Children of the Sun still rule, or ruled within historical times ; in other places, such, for instance, as southern Celebes and the neighbouring region, the political constitution is based on the dual organization.

Indonesia, like India, has been the scene of later movements of culture, such as that of the Hindu, which have obliterated much of the past and have reduced the old order to fragments. It is when we arrive at the gateway of the Pacific that signs of the old society become prominent. One of the most wonderful sites of an old civilization in the world, and one that is practically ignored, is that of the Carolines, the group of islands situated in Micronesia. Here, in Ponape, there is a great artificial Venice, with quays and breakwaters built out into the sea, made of immense blocks of coral. The people of the Carolines, whoever they were, were highly civilized, and the existence of this great civilization on the boundary of the Pacific is of fundamental importance to all students of movements of culture. Men who were capable of feats such as recorded by Mr. F. W. Christian, in his work on *The Caroline Islands*, who could build great walls and breakwaters, who could install elaborate irrigation

works, were quite capable of civilizing America. That would not have been an impossible task for them. Indeed, it seems, to me at least, inevitable that, having got so far east these men could hardly help going still further.

The political and social constitution of the Caroline Islands must formerly have been based on a thoroughgoing dual system. Even at the present day society is organized in that way. Each village is ruled by two families, which provide respectively the sacred and war chiefs. These two families intermarry, and this rule holds good throughout the village, so that a man has to take his wife from the other group. Sometimes the village is arranged as two parallel rows of houses, with a street between, and the members of each group have to live on one side of this street. Therefore the rule is that you have to marry across the street. Each village, when large enough, has two landing-stages, one for each side. In the club-houses, the members of either group sit down the right or left hand side while ceremonials are in progress. In every way the life of the community is on a dual basis. Between the two groups there is incessant hostility.

The important thing to remember about this form of society is that it is not found universally in Polynesia, although the Polynesians, from one end of the Pacific to another, are related to each other. It is only found in regions where there are pearl-beds, or gold-fields. In those places you will invariably find remains of the

archaic civilization. For instance, the dual organization of society, stone circles, and other patent signs of the archaic civilization exist in British New Guinea, but are absent in the Gilbert, Ellice, and other groups of Polynesia. In British New Guinea, in regions where these remains are to be found, there are pearl-fisheries and gold-workings, such as have attracted the people of the archaic civilization to the uttermost ends of the earth. In Melanesia there are many pearl-fisheries ; the region is full of stone remains of the archaic civilization ; and society at the present day is organized on the dual basis. Each community consists of two parts, the members of which must intermarry, just as in the Carolines. Hostility exists between them, they have their distinctive colours, and one is superior to the other, just as in India and elsewhere. This dual form of society is found also in San Cristoval of the Solomons, the island that contains such manifest traces of Egyptian influence. In New Caledonia, again, there are dolmens and other megalithic monuments, extensive irrigation systems, chiefs calling themselves Children of the Sun, who are mummified after death, the dual organization and other conclusive tokens of the influence of the archaic civilization. This is also the case in Tahiti, on the other side of the Pacific, and the scene of the most important pearl-fisheries of Oceania at the present time.

In short, it can be shown that in those parts of Oceania which are rich in pearls, gold or some

analogous form of wealth the culture of the peoples approximates, or formerly approximated with varying degrees of closeness, to that of Egypt in the Pyramid Age. We find mummification for rulers, the dual organization of society, the ruling class of the Children of the Sun, the sun-cult, irrigation, polished stone implements, megalithic monuments, and many other features of culture which, as has been urged in *The Children of the Sun*, came into existence in Egypt. On the other hand, in those parts of Oceania where such valuable things are lacking, such as the Gilbert, Ellice, Tokelau, and other groups, which have been colonized later, this archaic civilization is in ruins, and but little trace of it can be detected.


One interesting feature of the colonization of the Pacific by the builders of megalithic monuments is that they brought with them their own food-plants. Polynesians live largely on the produce of the bread-fruit, banana, and other plants. The bread-fruit does not belong to Polynesia at all. In that region it is not found to seed, but has to be propagated by suckers, like the banana in the islands east of Fiji. Both the bread-fruit and the banana belong to India, and it is certain that they must have been transplanted bodily to the confines of Polynesia. The important feature of this accomplishment lies in the fact that these plants had to be propagated by suckers, for in Oceania they have lost the power of seeding. It is a feat of no mean order successfully to

transplant suckers over several thousands of miles of sea, and to rear the plants in their new home. People who could do that would have no trouble in taking the taro to Egypt and other parts of Africa. This skill in horticulture is only additional evidence as to the high stage of culture of these old wanderers, the men who built Ponape and worked the great gold mines of India and the Malay Peninsula. They were no barbarians, but men of high skill in everything that they undertook. As witness of their stage of culture it may be said that there still survive, in the Carolines and on Easter Island, forms of writing. The possession of a script is evidence of a high form of civilization, so the fact that these men could write is of great importance. It must further be noted that these men of old have left behind them, in Celebes, and probably elsewhere in Indonesia, celts of copper. Therefore the ancestors of the Polynesians were, for yet another reason, men of a high order of culture, of a far higher order than is generally supposed.

When we arrive on the American coast we find that Peru, Costa Rica, Guatemala, and elsewhere preserve traces of the former existence of men of a high order of civilization. We find the people on the coast of Peru erecting great pyramids, building numerous megalithic monuments, making wonderful pottery and jewellery, practising mummification, and in every way reproducing the salient features of Egyptian civilization of the Pyramid Age,

with no essential additions, but several subtractions. The coastal people of Peru are interesting in that they made pots with double spouts, just like those of the Egyptians and Cretans. Moreover, there is evidence for the past existence of the dual organization of society in Peru and Colombia, although the facts are not so plentiful as could be wished. The work of recent expeditions in Brazil suggests that a dual organization of society of a thorough-going nature must formerly have existed in South America. The motive for the occupation of Peru by the men of the archaic civilization is obvious enough when the vast stores of gold, silver and other minerals that the country contains are borne in mind. The great centre round Lake Titicaca was in a region full of such wealth. The founders of the Peruvian civilization had not forgotten their old skill on their travels across the Pacific, for they installed immense irrigation works, constructing systems of terraces running thousands of feet up the sides of the Andes, with stone retaining walls, that excite the admiration of all who examine them. Sometimes the topmost terrace is only about a yard square, and in it were carefully planted grains of maize, or tomato or potato plants. The Peruvians, at the time of arrival of the Spaniards, were cultivating eighty different sorts of vegetables. Their civilization was, in some respects, one of the most remarkable that the world has ever seen. Their royal family reproduced with great fidelity some of

the important characteristics of that of Egypt ; their dead were mummified, as indeed were those of most of the people ; they practised marriages of near relatives ; they were the Children of the Sun ; they built pyramids ; and in many other ways they resembled the rulers of Egypt of the Pyramid Age.

 In Costa Rica the ancient remains are of great interest, but little yet is known of the conditions in that country. The place of the greatest interest to students of the movement of culture is the region of Central America and Mexico. Here was established the great civilization of the Maya, which in time gave rise to all the civilizations of Mexico, Honduras, Yucatan, and the United States generally, with the exception of the west coast, which evidently has affinities with Asia. This Maya civilization, so far as we know it, reproduces many characteristic elements of Asiatic culture, and has nothing peculiar to itself. The Maya people had polished stone implements, pyramids, the sun-cult, and many other elements of culture that go to make up the archaic civilization. Since it was the parent civilization of the northern half of the continent, its mode of origin is of great importance to us.

One of the most interesting features of the Maya civilization lies in its possession of elements of culture that can only have appeared there by direct transmission from the neighbourhood of Asia. For instance, many features of the pyramids and of the ritual conform so

closely to those found in Cambodia in the early centuries of our era as to leave no room to doubt of their origin. Again, as Elliot Smith has shown so clearly, certain carvings at Copan, one of the earliest, if not the earliest, of the Maya cities, are those of Indian elephants. That the carving is intended to represent an elephant no one can well contest. But according to Elliot Smith the carving is that of an Indian elephant. The elephant is, of course, unknown in America during the Christian era (2), so it follows that the carver, or the man who inspired him, must have come from Asia. This is made the more probable in that, in the later Maya cities, no representations of elephants of such realism are found, but, on the other hand, the native artist, never having seen an elephant, confused the trunk with the beak of a macaw, and finally produced a carving of a macaw beak pure and simple. This is only what would be expected.

The founders of the Maya civilization lacked none of the skill of the rest of the people of the archaic civilization. They discovered maize very soon after their arrival, and began to cultivate it. As they formed new settlements they took this plant with them, and its use ultimately spread throughout the United States.

The mode of spread of civilization in America was of the same nature as in the rest of the world. The food-producing people went from one source of valuable materials to another, taking with them the typical elements of the

archaic civilization. For instance, the old Mexican cities are situated so closely in association with the modern railway systems that little doubt can exist as to the intentions of their builders. Railways were made in Mexico for the mineral traffic, and not for passenger traffic. When, therefore, it is found that the ancients made their settlements in regions now served by railways, as I have shown in a map in *The Children of the Sun*, there can be no doubt that they were interested in gold, copper, and so forth, just as are modern men. The Mexicans were great users of metals, so no difficulty lies in the way of the acceptance of the view that their choice of settlement was guided by the presence of raw materials.

In course of time Mexicans began to work up into the United States, taking with them the characteristic features of the archaic civilization, such as the Children of the Sun, the use of polished stone implements, irrigation, the dual organization, and so forth (2). Their aims were to exploit the wealth of that vast territory. In the eastern States they found innumerable sources of pearls in the basins of the great rivers; they found gold, copper, and other metals in the Apalachian Mountains; they got copper on the shores of Lake Superior; they mined turquoise, gold, copper, and so forth, in New Mexico and Arizona. In all these places they left behind them communities with cultures so like that of the archaic civilization as to leave no reasonable doubt as to their

derivation. The pearl-fishers of the eastern States left behind them thousands of mounds, some of them of enormous extent, that are obviously degenerate pyramids, some of which contain burial chambers of stone ; and in these mounds there have been found many hundreds of thousands of pearls, unfortunately burnt, and so of no use. These mounds are invariably situated near to water ; they are on the banks of the rivers, and lakes where pearl-bearing mussels and oysters are still to be found (5).

Thus a movement of culture that set out from Egypt about the beginning of the fourth millennium B.C. ultimately landed in America about the beginning of our era, and there founded civilizations essentially the same as that of Egypt in the Pyramid Age, and only differing from it in certain details due to the circumstances in which they were founded. This movement took three thousand years, more or less, to accomplish this journey, but it can be traced with fair accuracy for thousands of miles. When we remember the high degree of culture exhibited by the people of the archaic civilization in India, Indonesia, and Oceania, there is little difficulty in believing that they originated the civilization of America. Indeed, there is one imperative reason why this should be the case ; for, as has been said, the Maya civilization is the most advanced of those of the northern half of America, and from it were derived all the later food-producing communities, with the exception of those of the

north-west coast. It is found, as an invariable rule, that, as time goes on, the cultural level in all parts of this great region of North America invariably drops. One element of culture after another is lost, and, so far as is at present known, there is not one fact to show how any element of culture originated in America. That is to say, the Maya civilization suddenly appears from nowhere, and it is at its zenith at its very beginning. How could this apparent miracle happen, except as the result of the arrival in America of men with the civilization that had been built up so slowly and painfully in the Ancient East? When it is remembered how many hundreds or thousands of years it took the Egyptians to get from the lower Palæolithic Age to the Pyramid Age, how they acquired one element of culture after another, it is simply incredible that another people, entirely independently, traversed the same path, or rather, got to the same results, in the space of a few short years, and left no apparent trace of the means by which they accomplished this feat.

This great ferment of civilization did not confine itself to the production of the movement across the Pacific to America, although that is certainly its most impressive achievement from the spectacular point of view. It was at work in all parts of the earth. We find, for instance, in Korea a great group of dolmens situated near what Baelz describes as one of the richest gold mines of Asia. We find in Japan likewise, a country rich in minerals, many

traces of the archaic civilization; and the political organization of the Japanese, their Mikados descended from the sun-goddess, and their Shoguns clearly reveal the origin of the civilization of these people. In the region of the upper Yeneisei, again, there are many dolmens and pyramids, together with extensive irrigation systems, in a region full of ancient gold and copper mines (6), but too little is as yet known of this region and of Mongolia to make it possible to say much more about them. This is unfortunate in that, as will be shown later, some of the most important ruling groups of the world came thence. Mention also must be made of the dolmens of the Caucasus and Armenia, and of their attendant irrigation systems.

In an account of the spread of civilization from the Ancient East it is impossible to omit any mention of China. It is agreed on all sides that China derived its civilization from the West. There is one significant feature concerning the possible mode of origin of Chinese civilization that well merits attention. The place most closely associated by the Chinese with the origin of their civilization is Siangfu, the capital of Shensi. Siangfu is situated on the banks of the Wei, a tributary of the Hoang-ho or Yellow River. It is near to important gold and jade mines, and therefore would have attracted men possessed of the elements of culture of the Ancient East; but, what is more important, there are near Siangfu, as Mr. Nicholls has shown in his work *Through Hidden Shensi*, some

enormous pyramidal mounds of earth, placed four-square to the cardinal points, whose origin is entirely unknown to the Chinese. What is the meaning of these remarkable monuments, situated, as they are, in the very cradle of the Chinese race, and utterly unlike anything that the Chinese themselves have ever made, so far as is known, with the exception of a pyramid in Shantung, a province where early outside influence is to be detected? Is it true, as de Guignes so long ago asserted, that Chinese civilization owes its origin to an Egyptian colony? Or are the Babylonians to take the credit in this case, for they too built pyramids? Whatever be the explanation, it is evident that the problem of Chinese civilization will not be solved until this mystery is cleared up.

When thinking of the western origin of Chinese civilization it is important to try to discover traces of a movement of culture across central Asia towards China. We should expect, after the discussions of the past few pages, to find that the first civilized settlers of Turkestan were out on a definite search, and that their mode of settlement had some reference to their desires. It is certain that the first food-producers in eastern Turkestan were men who knew of gold and used it extensively. They were also irrigators. But they did not make any great use of stone, their houses being of brick. Therefore there is little reason to think that this cultural influence was directly due to Egyptian influence. It is more likely that it

was the result of Babylonian influence, since the culture of Persia was impregnated through and through from that direction, the early Persian writing, for instance, being based on that of Babylonia. Whatever the origin of their cultures their intentions were evidently the same as those of other civilized men of the times. In this case they were seeking gold; for in Turkestan all the gold is in the rivers, some of which—for instance the Zerafschan—were famous in antiquity. There is no gold in the rocks; it is all in the river gravels. Therefore any people engaged in getting gold would tend to concentrate on the river banks. Moreover, if they were irrigators they would also tend to concentrate in that way. If on the same map be plotted out the distribution of irrigation in central Asia, as given by Moser, in his work on *L'irrigation en l'Asie Centrale*, and that of gold, as given by Mushketov in *Les richesses minérales du Turkestan russe*, it is found that the rivers with gold have irrigation systems along their banks, while those without gold have no such remains. The inference is obvious: the first food-producers of central Asia were civilized men who sought gold, and settled where they found it. These men worked eastwards, getting gold and installing irrigation systems, until, in the basin of the Tarim, or somewhere in the neighbourhood of Khotan, they came into contact with the ancestors of the Chinese, who evidently were in the pure food-gathering stage of culture, and gave them

the elements of their civilization. That seems to be the fundamental position with regard to the origin of Chinese civilization. That Babylonian influence was probably the most important is probable. The pyramidal mounds of Siangfu may well have been Babylonian. It may be, and probably is, true that Egyptian influence lies at the base of Babylonian civilization, but that civilization was well able to live its own life, once it was stably founded, and to exert influences on the surrounding countries, just as the Dravidian civilization of India was able to found those of Burma, Cambodia, and Java.

It is not easy at first to realize the nature of the process of spread of civilization from the Ancient East to all corners of the globe. It seems natural to imagine that people in all parts of the world would independently have come to invent the fundamental elements of civilization. Nevertheless, all the evidence is to the effect that the outlying civilizations were founded by men wandering about the world seeking for gold, pearls, and other desired substances, who found fresh lands either uninhabited by men or tenanted by wandering bands of food-gatherers. Out of the combination of these two elements, physical and cultural, grew the great civilizations of the earth. It is fascinating to think that most of the important gold-fields and pearl-beds of the earth had been visited by men many centuries before they were opened up by Europeans, to realize that the gold-

110 THE GROWTH OF CIVILIZATION

miners of New Guinea are digging up polished stone implements from the gold gravels, just as did the gold-miners of California during last century, as silent witnesses to the former presence of the men of the archaic civilization. Men were at work in Alaska many centuries before Europeans discovered gold there. And so the tale runs in all parts of the earth, whether it be West Africa, Rhodesia, the Ural Mountains, or Sumatra. Modern exploiters of gold, pearls, and other precious substances have often been anticipated by men the memory of whom has long since disappeared among the native populations.

Some inkling of the manner of spread of such early communities may be derived from the story of the foundation of the kingdom of Pegu in Burma. In this story it is said that the founders, men of royal family from India, took with them many families in order to make a settlement (7). The people of the archaic civilization must have moved about over sea in large boats, and probably they carried as many as two hundred or more individuals at once. A few boatloads would soon enable them to establish themselves securely. When these people arrived in any country they would probably soon make friends with the natives, and would incorporate them in the community as the lower orders, giving them their rules and regulations with regard to marriage and so on. The skilled craftsmen that they brought with them would set to work and would soon

build a considerable settlement, the culture of which would in many respects resemble that of their homeland. But, as time went on and the memory of the homeland became faint, when ideas became influenced by the new life that they were leading, a change would come over their art and other activities, and the culture would take on its own particular characteristics.

One important feature of the first civilizations of the far distant parts of the earth is that they were one and all founded on irrigation, the fundamental element of the first food-producing culture. This irrigation was practised by these wanderers as their mode of cultivation—they knew no other—and they installed irrigation systems wherever they went, irrespective of climatic and other circumstances. And it was round this irrigation that the whole life of the community centred, the greater part of the religious ritual being concerned with ceremonies connected with the production of crops.

If it be true that the earliest civilizations of the world were the work of wanderers from the Ancient East two problems are immediately presented for solution. The first is as follows: How are the existing food-producing peoples of the lower culture, who do not practise irrigation in many cases, to be accounted for? The second is: How is the ultimate degradation and sometimes the disappearance of these early civilizations to be explained? These two problems will be considered in turn.

CHAPTER VI

PEOPLES OF THE LOWER CULTURE

IT is commonly assumed that the food-producing communities of the lower culture, that is to say, peoples who are generally termed "savages," represent a cultural stage through which the higher civilizations must once have passed. This supposition underlies practically all current speculation concerning the beginnings of civilization ; and sociologists, psychologists, economists, and other students of humanistic studies believe implicitly that what is done or thought by lowly peoples necessarily represents what was done and thought by the ancestors, say, of the ancient Egyptians. This attitude towards less developed peoples is due in great measure to the influence, or rather the misunderstanding, of the evolutionary doctrines to which the work of Darwin gave such an impetus during the latter half of the last century. Since, in the organic world in general, it can be said, broadly speaking, that the simpler forms of life have preceded those more highly organized, it was assumed, with a certain amount of plausibility, that the simple forms of social organism must necessarily have preceded the more advanced in all parts of the world, and this principle was

uncritically applied to the study of human culture.

The first writer who set men's feet firmly on this road of thought in this country was the late Sir Edward Tylor. Herbert Spencer also played an important part in the history of the movement. But it is regrettable that the followers of Tylor pushed to an extreme one side of his thesis at the expense of the other. Had they followed him more strictly it is possible that the history of anthropological thought during the past fifty years might have been far different. For Tylor, although asserting the general proposition of advance in culture in all parts of the world, at the same time drew attention to the fact that degradation of culture had taken place on a large scale ; and he stated that the study of cultural degradation might yield important results. It is a profound pity that this hint was not followed up seriously ; for there can be no doubt whatever that the culture of the less civilized food-producing communities of the earth is derived from some higher civilization ; that, in fact, the great wave of culture which, as was seen in the last chapter, swept over the earth from the Ancient East, was the stimulus which inspired the cultures of native populations from China to Peru. Or, to put it another way, not one particle of evidence exists to warrant the belief that any food-producing people of lowly culture can be shown independently to have invented any of those fundamental arts and crafts that they possess.

These are strong statements, and they require strong support. That support is readily forthcoming. The position can be considered in general terms, or in detail, but the result is always the same. To take the general considerations first. Consider Sketch Map No. 7. It shows roughly the distribution of remains of the archaic civilization in all parts of the world. It shows, also, the boundary between the food-gatherers and the food-producers. Thus boundary does not represent the actual condition of affairs at one particular time. It represents what is certainly known to have been the condition of affairs in different parts of the world at different times. For instance, the boundary between food-gatherers and food-producers is drawn just south of the Soudan in Africa, because it is known that the Bantu, the great group of peoples who now occupy Africa south of this line, only began to move south from the north-east about 1,100 years ago. Prior to their arrival the whole of this vast region was given over to the Bushmen and Negritos, with the exception of southern Rhodesia, where were the great mining settlements of peoples from Arabia, which are such eloquent witnesses to the skill of the men of old. Again, the boundary in northern Europe and Siberia represents roughly what must have been the condition of affairs before the spread of the Yakut and other tribes, who were driven northwards by the pressure produced by the conquests of Genghis Khan in the thirteenth

century A.D. In North America the boundary represents the distribution of population before the arrival of the Spaniards and the introduction of the horse, the result of which was to cause a movement into the plains.

The meaning of this boundary, therefore, is that it can be shown that food-producing peoples have, in historical times, been advancing into territories occupied solely by food-gatherers. This is precisely the sort of movement that presumably gave rise to the first food-producing settlements in the outlying parts of the world. It was said, it will be remembered, that the food-producing stage of culture began in the Ancient East, and that the rest of the world was in the food-gathering stage of culture for a long time after the process of development of civilization had begun. It is evident that this movement is not, even now, come to an end; there still are food-gatherers, and their conversion into food-producers is still proceeding.

When the map is considered as a whole one remarkable fact emerges. It is seen that the most highly organized societies of ancient times—those of the Ancient East, China, Mexico, and Peru, all of them founded at different dates, it is true, but all of them the earliest in time in their respective parts of the world—occupy the central positions; next them are various food-producing communities of a lower order of culture; and on the outskirts are the food-gatherers. This distribution of

culture can obviously have been the outcome of a great process of growth from the centre, the effect of the stimulus growing fainter as the original focus becomes more remote, this being a common feature of propagated stimuli. This comparative distribution of culture, combined with the knowledge of the actual outward movement of culture in historical times, makes it possible to rely with more confidence on the hypothesis that the whole of the culture of the outlying parts of the earth has been acquired by a process of transmission from an original centre.

When the relations between modern food-producing peoples of lowly culture and the highly civilized wanderers of the past are considered, one noteworthy fact at once emerges. The map shows that, in general, such peoples of lowly culture live in places containing ruins indicative of an order of civilization far higher than that which they themselves possess, or else they claim to have come from such a region. I have adduced a great amount of evidence in support of this thesis in *The Children of the Sun*, to which the reader is referred for a discussion of details. At the present day, in the region of the upper Yeneisei, peoples of lowly culture, hardly above the food-gathering stage, are wandering about in places full of ruins of ancient irrigation systems, large stone monuments, and many ancient copper and gold mines, all of them indicative of the former presence of people with a high order of civilization. Even in a region so far away as Alaska, the home of

the Eskimo, there are ruins indicative of the presence in the past of peoples of a high degree of culture, and this serves to account for some features of Eskimo culture that otherwise might cause men to think that they were a highly inventive people. In North America the relationship between the distribution of food-producing peoples and remains of a high order of civilization is very close, for the boundary of the one is that of the other. The region east of the Mississippi and south of the Great Lakes contains many hundreds of mounds, the contents of some of which, as has already been remarked, reveal clear traces of derivation from Mexican sources. It is certain that the Indian tribes of Columbian times were not in the habit of building mounds on the scale of their predecessors. Some of them, such as the Cherokee, certainly still made mounds in post-Columbian times, but they were small in size. This goes to establish a continuity between the original mound-builders and the Indians of Columbian times, but it shows, likewise, that there had been a drop in culture. We find, again, in the region of New Mexico and Arizona, which is rich in ruins of settlements of people who installed great irrigation systems along the sides of the cañons, that the present-day Indian tribes are in no way the equals, culturally speaking, of their predecessors. Something or other has happened to cause a drop in culture. Throughout this region, as well as in Mexico and central America, there are numerous

wandering tribes who live in regions with ample traces of ruins of a vanished past, of which they have but little knowledge. And a like story could be told of Oceania, Indonesia, India, and Africa. It could be shown that throughout these regions there are tribes of low culture, living in places with a historical background of a far higher order.

It is not necessary, in this matter, to rely solely on the facts of geographical distribution to establish the relationship between early and late food-producing communities throughout the world. The peoples themselves give us information which is of incalculable value. They have preserved, in their traditions, accounts of the beginnings of their culture which agree so well with what we know from other independent sources, that no doubt can be held as to their reliability.

In dealing with native tradition it must always be remembered that the accounts of the beginnings of their culture are usually among the most cherished possessions of any community. Often, where youths are initiated into the tribe when they are about to become men, they are taught the traditions, and are enjoined to preserve them as close secrets, to keep them from the knowledge of women, children, and the uninitiated. Among many peoples a knowledge of his family tree is an essential part of the training of a member of the ruling group. So greatly do peoples the world over value their traditions.

It must be remembered, also, that savages

(so called) are intensely conservative. It is true, as is often said, that, in Australia, for instance, the meetings of the elders sometimes agree to modifications of rules, but these modifications are only allowed after serious discussion. Usually it is held that what was done by the men of old must be done now. The utter lack of inventiveness of peoples of lowly culture is a commonplace in ethnology, and, so far as I am aware, no known instance is known of the spontaneous invention of any important art or craft by any known community of that type. Since tradition is so important to them it is well to inquire what it tells us.

One of the best places in which to study tradition is the United States. Throughout that region the peoples, with but few exceptions, claim that they got their culture from twin brothers, usually the Twin Children of the Sun. These youths instituted their social and political organization, gave them the rules of government, and set them on their path. In the case of the Pueblo Indians, who were created by the Great Mother, the ancestors were brought out of the underworld by these wonderful youths, and when they arrived at their place of settlement they learned from them all the rules of government, the lore of the secret societies, and, in fact, all their traditional learning. Inquiry shows that this form of tradition is not fanciful, but that, on the contrary, it is based on fact. The Maya, the first food-producing people of North America, certainly were ruled

over by the Children of the Sun. Since the communities of the United States got their culture ultimately from the Maya, it is quite true that the Indian tribes were taught by the Children of the Sun. It is possible to go further. The Children of the Sun were living in Louisiana in the eighteenth century as the rulers of the Natchez. At the present day the Yuchi of the Savannah River consider that those members of the tribe who are dark-complexioned are the Children of the Sun by virgin members of their tribe, an instance of the doctrine of theogony that is associated with these folk the world over.

The fact is that the traditions of the Indian tribes are, in a way, historical. They recount a condition of things typical of the archaic civilization, for the culture which they claim was imparted to them by the Children of the Sun is similar to that characteristic of the communities ruled over by the Children of the Sun, a fact which is shown in *The Children of the Sun*. The communities that tell such stories are those who have no ruling group of Children of the Sun. Nevertheless they remember full well whence their culture was derived, and have handed down this knowledge from generation to generation in the form of traditional tales.

It is along these lines that the culture of the Australian natives can be accounted for. These people possess the institution of totemism in a pure form ; and, because of their low physical

type, and their general lack of culture, they being still in the food-gathering stage, they figure largely in all discussions of the origin of that extraordinary social institution.

It would be thought that, prior to the acceptance of the totemism of the Australian natives as really primitive, serious attempts would be made to cope with the fact that the natives themselves disclaim all responsibility for their totemism, and for the intricate marriage rules and regulations that they possess. For they, one and all, assert that they owe their totemic institutions and marriage rules to wonderful strangers, connected with the sky, who came among them at some time in the past, and then, for various reasons, went away, either to the sky, or to some other part of the earth. It is usual to assert that the Australians invented these tales to account for the institutions whose origins they recount. But this is putting the cart before the horse. When these strangers are carefully examined, and when the institutions that they left behind them are considered, it is found that these institutions are exactly those possessed by the people of the archaic civilization, the wandering seekers for gold, pearls, and so forth. From these men of old the Australian natives must certainly have acquired the craft of making polished stone implements, which they possess in common with the old gold-miners of British New Guinea, just across Torres Straits.

The probable reason why the Australians came to possess the institutions of totemism and of definite marriage regulations is as follows: The people of the archaic civilization were actively engaged in exploiting the wealth of British New Guinea. Some of them crossed Torres Straits, and began to wander about Australia, seeking for gold and other substances. In the course of their wanderings they came across the food-gathering natives, and probably married some of their women, and taught them their rules and regulations concerning birth and marriage. Then, for some reason or other, they disappeared. This disappearance may have some connexion with the fact that the gold mines of New Guinea were abandoned long before they were exhausted. The natives of Australia, having received this dose of culture, went on after their disappearance with the elaboration of the rules and regulations, and, in the absence of any new cultural influence, simply preserved intact what the strangers of old had given them, and remembered these wonderful beings in their traditions.

In some such way as this it is possible to account, the world over, for the retention by peoples of low culture of stories of wonderful beings who gave them their institutions. These stories are certainly true; for, as has been said, what they recount corresponds with the cultural stage of the archaic civilization, the powers ascribed to these culture-heroes, are exactly

what they themselves claimed, and the social institutions that they taught being those which they themselves possessed. Thus native tradition comes to the assistance of other lines of inquiry and fully supports the conclusions reached by them, namely, that peoples of lower culture have, all the world over, derived their arts and crafts from peoples higher in the cultural scale.

From the point of view of the student of the development of civilization in any of its phases there is nothing more important than the realization of the nature of the process described so briefly in the preceding chapters. Civilization, broadly speaking, connotes the sum total of the activities of men, the various arts and crafts that they have invented, the means of intercommunication, and all that goes to make life richer and fuller. The more this process of development is studied the clearer does it become that, as in other manifestations of life, growth is the universal rule. There is no reason whatever to believe in the independent development of culture in different parts of the earth. What counts above all is the accumulated experience of mankind, on which fresh advances are based; that is to say, human culture is a thing in itself, with its own laws and principles. The dominant factor is the human mind, with its needs and desires, and the external world only enters into relationship with man in so far as it ministers to his needs

and desires; it does not force him, to any appreciable extent, to do its will, as we are so often told.

In *The Origin of Magic and Religion* it was urged that early men, when building up their systems of thought concerning life and death and man's relation to the universe, proceeded by steps, and began with vital facts common to mankind. This certainly is true, so far as all the available evidence goes, for the development of culture in general. No fresh advance is made except on the foundations laid by those who have gone before; the inventor is only the last link in a chain of inquirers.

When we speak of the civilization of Egypt, the civilization of Crete, the civilization of Mexico, we must therefore be very clear as to what we really do mean. We do not mean that these civilizations represent a growth from the beginning, a spontaneous generation of culture. If we do mean that, then we are going against every particle of available evidence, and are simply making that appeal to ignorance that has hitherto been the bane of these studies. What really is meant by the "civilization" of any country is simply the variety of civilization as a whole possessed by that country. Every community, like every individual, is different from every other community, simply because the circumstances of its growth and development are different, and for no other reason that counts.

The demonstrable fact that degradation of

culture, not advance, is the rule in so many of the outlying parts of the world, makes it more probable than ever that civilization began in one place. The elimination of vast stretches of the earth's surface from the list of possible centres of origin goes to show that civilization is something unique, and therefore that one centre for the discovery of food-production, its fundamental element, would be expected. Beyond doubt we must look to a small area of the earth's surface for the origin of food-production; so, therefore, why not to one community?

Given that degradation of culture has taken place on an immense scale, how is advance in culture to be accounted for? As is well known, men, at certain times and in certain places, have made great discoveries, and have added much to the common store of civilization. This service was rendered to mankind by the Athenians, by the Italian republics, and by other communities at various times. They received their culture from their forbears, and added to it. The study of the conditions that decide when and where cultural advances are made is one of the most important that men can pursue; for when that problem is solved we shall be able so to order our society that the fullest possibilities of development of mankind will be realized.

CHAPTER VII

THE COMING OF THE WARRIORS

IT is often said, almost as if it were a law of nature, that civilizations arise, have their day, and then disappear. A superficial survey of the history of civilization certainly lends some support to this view, for it is true, beyond doubt, that practically all of the older civilizations have disappeared. China, of course, provides an exception to the rule. The Chinese civilization has now existed for four thousand years, more or less. Our own civilization may last continuously for an indefinite period. The only danger that threatens it is the one that will be defined in the course of this and the following chapters.

The problem is this: The civilizations of central America, of Mexico, of Peru, of southern India, of Indo-China, and of Java, grew and flourished up to a certain point, as did those of Babylonia, Assyria, Persia, and that of the Hittites. Then something happened in every case, and the civilization decayed with greater or less rapidity.

Not only have the former highly organized civilizations degraded in culture, but the ancient mining settlements of the people of the archaic civilization show every sign of hurried abandon-

ment, usually long before the exhaustion of the supply of metal. The ruins of southern Rhodesia constitute an excellent instance. The area covered by them to-day is a rich mining region, where gold, copper, and other minerals exist in abundance. The ancients had discovered the best paying mines, and thereby had exhibited a high order of knowledge. Their skill was so great that nowadays, when a mine is being advertised for sale, the presence of ancient workings is always mentioned. These ancient workings are usually rich, and are not exhausted. Similarly in the case of the old gold mines of India and the Malay Peninsula: to-day they are being opened up once again, for the ancients had not exhausted them. This is also the case in British New Guinea, where modern gold-miners are constantly digging up polished stone implements, and stone pestles and mortars, left behind them by their predecessors, and all of them unknown to the modern native population. The mining activity in the Yeneisei region also came to a sudden end.

How is it that, all the world over, the ancient order was destined finally to perish? There is no trace whatever of a gradual degradation of culture. On the contrary, the signs usually point to some catastrophic event having taken place, to the sudden overwhelming of a community by an invasion from without. Apparently the first-comers were able to enjoy peace and quiet for some time. Then they were disturbed, and some influence enters in to produce

a degradation of culture, more or less abrupt according to circumstances. It is to the cause of this cultural degradation that the attention of the reader is now directed.

In certain cases most of the civilization of the people of old has disappeared. Such cases are those of the mining settlements of the Malay Peninsula, of Rhodesia, Alaska, and elsewhere. In such places we now only find a few peoples of the lower culture, whose institutions show but faint traces of the influence of the ancients. These instances may therefore be placed on one side as serving to throw little light on the problem of cultural degradation. We simply know, for example, that the gold-miners of the Malay Peninsula have gone. Why they went we do not know, or at least cannot tell from a consideration of the Malay Peninsula alone.

When attention is turned to civilizations like those of central America, Mexico, China, etc., that were firmly established, and could not collapse suddenly, then it soon becomes evident what has happened. It can be laid down as a general principle that, in the outlying parts of the world, the earliest civilization was the most advanced in the arts and crafts. It can be asserted, moreover, that the next people who appear on the scene in such countries were invariably warlike in nature, and that they have gained their position by conquest. In fact, the ancient civilizations were not allowed to remain long unassailed. Before long a warlike people would appear from somewhere

or other, and would attempt to displace the existing ruling family, the attempt sometimes being successful.

It is hard to tell when this process began. It is asserted by some Egyptologists that, not long before the beginning of the Dynastic Age, the ruling group known as the "Followers of Horus," who called themselves by the name of Horus, came from the East, probably from southern Arabia, and made themselves the rulers over Egypt. This may be so, but it is difficult to come to any positive conclusion on the matter. In the case of the Semitic-speaking people who founded the kingdoms of Akkad in southern Babylonia there is very little doubt. They came from elsewhere, and in time dominated Babylon, as well as the neighbouring Elam, and pushed their conquests as far as the Mediterranean and Asia Minor. Their great king, Sargon of Akkad (*circ.* 2872 B.C.), together with his descendants, constitute the first known instance of a warlike military ruling group (1). They invaded a country, Babylonia, that had previously been occupied by a peaceful folk, ruled over by priests rather than by warriors. It is with the coming of these warriors that real warfare began in Babylonia.

It is not possible as yet to state whence came these conquerors. It is noteworthy, however, that their culture shows strong traces of Egyptian influence. They brought with them to Babylonia the Egyptian mode of counting years and certain forms of Egyptian arts and

130 THE GROWTH OF CIVILIZATION

crafts, but in no case on such an advanced scale as in Egypt itself. The inference is that the outward expansion of Egypt, as the result of the expeditions led out by members of the ruling groups, gave rise to the movement of the Semites. This is probable when it is remembered that the Egyptians of early dynastic times were actively engaged in exploiting the mineral resources of the Sinaitic Peninsula and of the land of Punt in southern Arabia (2). In both cases they would have come into contact with peoples speaking a Semitic language, and this would account for the Egyptian traits in the culture of the invaders of Babylonia, who founded the kingdoms of Akkad, and finally dominated Babylonia and the surrounding countries.

From this time onwards the great civilizations of the Ancient East were destined to sustain the onslaughts of warlike strangers coming from somewhere on their boundaries. Among these warlike groups may be mentioned the Kassites, who came down from somewhere in the north, and dominated Babylonia from about 1760 to 1100 B.C. These Kassites were the forerunners, it seems, of the great group of Aryan-speaking military aristocracies whose doings have filled the pages of history for many centuries. Another important invasion of warlike peoples was that of the Hyksos, who invaded Egypt probably about 1680 B.C., and were finally expelled about 1580 B.C. It was to these warlike strangers, the Kassites and

Hyksos, that Babylonia and Egypt respectively owed the horse and wheeled vehicles. Prior to their arrival the ass had been the beast of burden, but had not been ridden, and wheeled vehicles had been unknown. The Hyksos educated the Egyptians in warfare, and left them much more militaristic than they previously had been.

The most important peoples in Europe, from the second half of the second millennium B.C. onwards, were the Aryan-speaking group, who for centuries, as the Dorians, Achæans, Celts, and Teutons, were a constant menace to the peace of the great civilizations of the Mediterranean basin. In many cases these warlike peoples succeeded in destroying the civilizations of the eastern Mediterranean. For instance, the Hyksos invasion of Egypt seems to have had grave repercussions in Crete, whose civilization suffered an eclipse about that time. But what the Hyksos had begun was finished by the Dorians, who swarmed down into Greece from the north about 1000 B.C. and utterly destroyed the wonderful civilization of Crete.

The great movement of Aryan-speaking peoples in Europe can be dated at some time in the Bronze Age, about the beginning of the first millennium B.C. The most important of this early group of peoples were the Celtic-speaking group, who are first heard of in central Europe. Their great area of development was in central Europe, in the regions that produced iron. By the fifth century B.C. they had

established a hegemony over the whole of central Europe; by the fourth century B.C. they were threatening the countries of the Mediterranean, and had conquered Spain; and they undoubtedly would have repeated the exploits of their predecessors in the Mediterranean itself if they had not been stopped by the Romans, themselves an Aryan-speaking people, who had acquired a strong measure of Mediterranean culture from the Etruscans, Greeks, and Carthaginians (3). The Romans themselves were destined to fall under the pressure of another group of Aryan-speaking peoples, the Teutons, who emerged from Scandinavia, and, after the fall of the Roman Empire, overran Europe, and well-nigh obliterated the civilization of the Mediterranean.

It is evident that this movement of peoples is utterly unlike that which first established civilized communities in the outlying parts of the earth. The first movement was centrifugal, for the earliest known dates of a civilization become more and more modern the further we go from the Ancient East. The men of the archaic civilization were moving out in an ever-widening circle, so to speak, until they had encompassed most of the world. The movement that we are now considering is of a far different order; it is mainly directed inwards. The warlike military aristocracies, the Hyksos, Semites, Dorians, Achæans, Celts, Teutons, and so on, came from the outskirts of civilization, and moved inwards. They were

apparently occupied in preying on civilizations already in existence. With their arrival on the scene the period of real warfare set in, and a world that had previously been occupied with the arts of peace, to the almost entire exclusion of fighting, became the scene of incessant strife, the result of which was to reduce many of the great civilizations to ruin and decay. That is the solution of the problem of the decay of civilizations.

It is possible to claim that such warlike peoples have existed ever since there was any civilization at all, and some appearance of truth is afforded by the fact that they can be detected in the Ancient East, certainly as early as 2872 B.C., when the Dynasty of Sargon of Akkad was founded. If warlike peoples were moving about in those days in Arabia and the neighbouring regions, why should not they have existed in other places? Why should not there have been an entirely different evolution of culture from that of the Ancient East taking place elsewhere, the result of which was to produce the great warlike groups of the earth?

In view of the great importance of these warlike peoples I shall devote the second half of this book to their consideration; for when their mode of origin is fully determined the problem of warfare will be on the way to its solution. As will be pointed out in the last chapter, warfare is not coeval with civilization; it took its intense form at quite a late stage of development; it is, in a way, a by-product of social evolution.

As a first step towards the solution of this problem of warlike military aristocracies it may be mentioned that the phenomenon, just described so briefly in the case of Europe and the eastern Mediterranean, is really of world-wide occurrence. All the great civilizations have ultimately broken up owing to the irruptions of warlike strangers from the outside. In the case of the Hyksos, Kassites, and so forth, we do not know whence they came; but we have clear knowledge in the case of the later peoples, which can guide us back into the past. We shall find, moreover, that the conduct of these warrior aristocracies is identical the world over, so that the behaviour of the Turko-Tartar peoples who harassed Asia for so many centuries, and even irrupted into Europe as the Huns, Avars, and others, can be equated to that of the Teutons, or of the Bantu of Africa. *Plus ça change, plus c'est la même chose.* This feature of these peoples makes it possible to gain with ease a fairly complete picture of their activities the world over.

The first proposition that it is necessary to lay down is that we never find these people wholly detached from some pre-existing civilization; that is to say, the notion of these warrior peoples originating their culture in the wilds is groundless. As an instance, the case of Abraham may be mentioned. Many writers, basing their reasoning on this case, have tried to make out that the sedentary agricultural phase of culture was preceded by another, in

which the people wandered about with their flocks and herds, and lived a pastoral life. This pastoral habit is certainly characteristic of the great warrior peoples of the world: they have practically never been sedentary agriculturalists; such a form of occupation is foreign to their customs. But it can be shown, in every case where knowledge is available, that the pastoral mode of life is a degradation from the original sedentary agricultural life. Abraham came, it will be remembered, from Ur of the Chaldees, so the Hebrews tell us. He wandered with his flocks and herds into Canaan, where, from the remains that have been left behind, he must have found a sedentary agricultural people. So all that we learn about Abraham goes to suggest that, in leaving Babylonia, where an immense amount of irrigation was carried on, he had just kept on the pastoral occupations of his homeland, and had wandered about seeking some fresh place in which to dwell. And, what is more, he had chosen to come to some other place occupied by people of a far higher degree of civilization than he himself possessed. Strictly speaking, therefore, Abraham represented a form of culture that was a degradation from a higher phase, which, moreover, lived a parasitic existence at the expense of earlier and more highly organized societies.

Before proceeding to show that the case of Abraham is typical, I may mention that at Anau in Turkestan, where the Pumpelly expedi-

tion found remains of a stage of culture dating from, say, 3000 B.C., which showed evidence of derivation from that of the Ancient East, there were no traces whatever of the domestication of animals, and the people evidently lived by irrigation; that is to say, the place had been colonized by people from the Ancient East, who had installed their irrigation systems and had not yet tamed any of the local animals. This, however, they had accomplished in later times, as is shown by the fact that the later remains reveal evidence of the domestication of animals. In those days there were no signs whatever of the presence of nomadic peoples with flocks and herds, who have figured so prominently in the history of central Asia. They were as yet unborn.

Again, in central Asia generally, the place where so many great movements of pastoral peoples have begun, it is found that the sedentary irrigators, already mentioned, and the pastoral nomads represent two different racial stocks, the irrigators undoubtedly being the first comers. Further north, in the Yeneisei region, where there are megaliths and irrigation systems, the nomadic horse-riding peoples came later. With their arrival the earlier mining activities almost entirely ceased.

If we turn to another quarter we find that the nomadic, stock-breeding tribes of Arabia claim descent either from Ishmael, the son of Abraham, or from the people of Yemen. The case of Abraham has already been mentioned. In the case of those nomadic Arabs

that claim to have come from Yemen, it is stated that their outward movement was caused by the bursting of the great dam at Mahreb, which upset all the arrangements of the water supply and caused wholesale migrations. This, or some political convulsion, undoubtedly caused the outward movement from Yemen of people who adopted the purely pastoral mode of life and abandoned for the greater part their settled, irrigating habits. This is well described in Robertson Smith's *Kinship and Marriage in Early Arabia*.

Far from these peoples constituting an early stage in civilization, there exists, as has been shown by these few instances, indisputable evidence that, all the world over, their culture represents the ruins of something far higher. It is probable that the mistaken idea currently held concerning these peoples has arisen as a result of the interpretation put on the case of Abraham, together with the adoption of ideas derived from the Darwinian school of biological thought.

It is possible, however, to put the question still clearer. Reference to Sketch Map No. 7 will show the reader two important facts with regard to warrior aristocracies—they originate on the outskirts of highly developed civilizations, and their place of origin shows traces of the past existence of peoples of a far higher degree of civilization than they themselves possess. It is impossible to indicate all stages of the process in one map, but that provided will amply suit the purpose. The first group,

which is of supreme importance for us as Europeans, is that of the Teutons. After the break-up of the Roman Empire they swarmed down all over Europe, and by their struggles for power among themselves produced, during the so-called Dark Ages, kaleidoscopic changes in the map. These Teutonic ruling groups originated in Scandinavia, in a region, therefore, that had been occupied by peoples from the earliest times when food-producing peoples came into Europe. Many great megalithic remains testify to the presence in that region of highly civilized peoples. Therefore the Teutons, whatever be their ultimate origin, are first met with in a place that had been occupied for many centuries. Moreover, this centre was on the outskirts of civilization at that time, and the Teutons were constantly being influenced, first by the Celts of central Europe, and then by the Romans. In no element of culture can they be shown to have been originators: they, like all other warlike peoples, simply lived on their more highly civilized neighbours.

If we go further back in European history and consider the Celts themselves, we hear the same story. For in the earliest settlements of these peoples in central Europe there have been found Greek and Etruscan remains, showing that highly civilized peoples from the Mediterranean had been working up into central Europe, and had given these barbarians some measure of culture. The Celts, like the Teutons, never invented anything; the whole of their

culture shows signs of derivation from the Mediterranean. Moreover, their countries of origin had previously been tenanted by peoples of the Bronze Age, who possessed a culture obviously derived from the Mediterranean. In no case do we find them apart from peoples of a higher civilization than themselves. The original Celts, as we know them, were a boundary folk, originating in a centre where remains of older peoples exist, and they obviously derived the whole of their culture from the Mediterranean, with the exception of their horse-riding habits.

Professor H. M. Chadwick, in his work on *The Heroic Age*, is very insistent on the point just made, namely, that the barbarians who threatened Europe throughout the centuries, really owed their stimulus to the very civilizations that they attacked. He states that the greatly military character of the barbarous Teutons who broke up the Roman Empire, as well as of the Welsh, who harried the Romans in like manner, was due to the influence of the Roman army organization on these peoples. Young nobles took service in the Roman army of the provinces, and learned all about military matters, and were able, on their return home, to apply the lessons they had been taught to effective purpose. This, by the way, is a commonplace in the contact between civilization and barbarism. It is only necessary to mention the case of the Zulus.

The words of Professor Chadwick so entirely

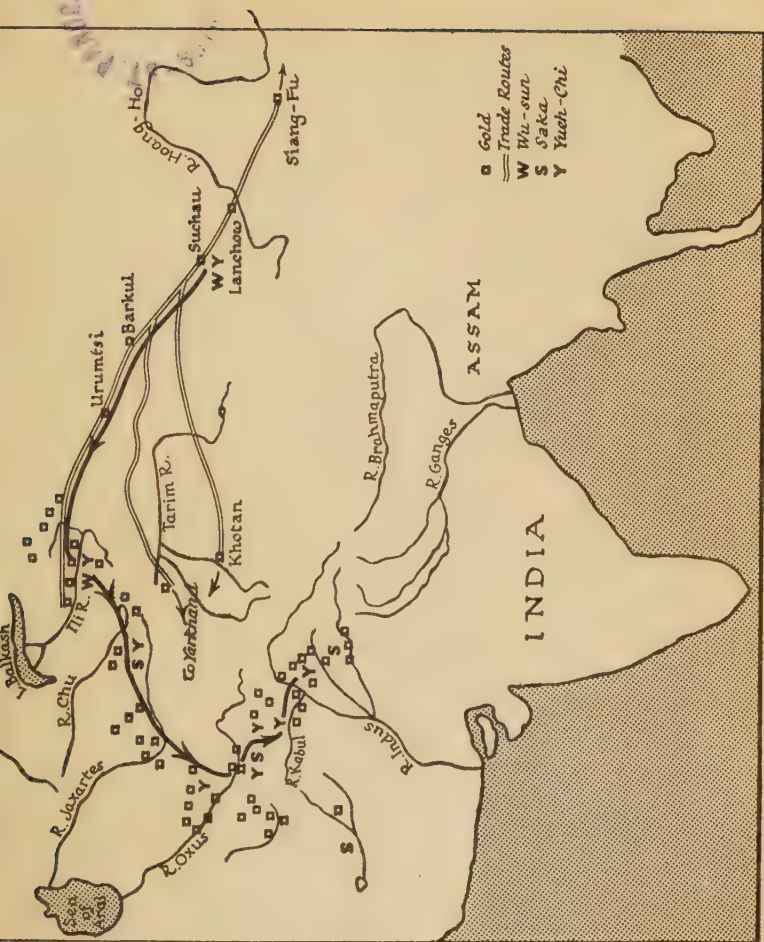
express what I am trying to say in this chapter that I take the privilege of quoting them in full. He describes the time of the barbarian invasions as a "Heroic Age," and he compares similar phases in various parts of Europe, with like results. When discussing the origin of such an age he says that we are not "justified in believing that the Heroic Age was a native outgrowth from an ancient and highly developed civilization. It does not appear that a Heroic Age can arise from such conditions, any more than from conditions which may properly be called primitive. In four of the six cases we have considered the Heroic Age can be traced back to a similar series of causes. Firstly, we find a long period of 'education,' in which a semi-civilized people has been profoundly affected from without by the influence of a civilized people. Then a time has come in which the semi-civilized people has attained to a dominant position and possessed itself, at least to some extent, of its neighbours' property. The phenomena which we have recognized as characteristic of the Heroic Age appear to be the effects produced upon the semi-civilized people by these conditions" (page 460). I should like to quote largely from this important work of Professor Chadwick, and also from his *Origin of the English Nation*, both of which entirely support the thesis of the second half of this book with a vast amount of learning, but I must be content to refer the reader to these writings.

So we see that, in the case of Europe, the great civilizations had, on their boundaries, warlike peoples who drew their cultural sustenance from them, and finally threatened to destroy them. These warlike peoples were therefore entirely parasitic. In one case—that of the Romans—the Mediterranean people did manage to civilize their conquerors to a considerable extent, and thus to render them mainly innocuous. The Romans began, as is known, as a small community on the outskirts of the Etruscan kingdom. Deriving a ruling class from the Etruscans they set out on a career of conquest. But while they were conquering they were learning from the peoples whom they overcame. Thus the Romans, while they never made any contributions to civilization of the order of the Greeks, whom they conquered, yet they performed this service to mankind, that they kept back the tide of barbarism for a while.

The picture just acquired of the barbaric conquerors of Europe is true for the whole world. In all cases they originate from a place with ample signs of a prior, usually more highly civilized, population; and they derive their culture from some source more highly civilized than themselves. In the case of the region of Mongolia and Siberia, marked on the map, we are dealing with one of the most important areas in the world, from the point of view of warfare; for thence have emerged all the great conquering Turko-Tartar peoples.

These peoples, as may well be seen from such works as Professor E. H. Parker's *Thousand Years of the Tartars*, de Guignes' *Histoire des Huns*, as well as from the numerous articles on the "Northern Frontages of China," published by Sir Henry Howorth in the *Journal of the Royal Asiatic Society*, all originated in this region. The first nomadic pastoral peoples—those who followed the old gold-miners of the Yeneisei region—seem to have come from the South, for they brought with them a style of art undoubtedly derived from Assyrian sources. This was also the case with the Scythians, the great warlike people who formerly lived in south Russia. The Turko-Tartar peoples originated in a region that is full of remains of people of a high stage of civilization, and they undoubtedly drew much of their cultural inspiration from Chinese and other sources. Of themselves, they contributed nothing to civilization. The Turks, for instance, who came from somewhere in Kansu, in the west of China, have never produced anything in art, literature, or science: they have simply been warriors who have lived parasitically on the rest of mankind.

The movements of peoples such as the Turks and Tartars have always been directed towards highly organized civilizations. In this they are simply acting like the warlike Aryan-speaking peoples of Europe. They have never troubled to move out across the boundary into the region of the reindeer-keepers of Siberia; they have invariably moved southwards and



NO. 8. MOVEMENTS OF WARLIKE PEOPLE IN CENTRAL ASIA

westwards, towards the countries that promised them vast stores of loot.

Much has been made of these movements of the Huns, Turks, and Mongols for the purpose of showing that man is strongly influenced in his movements by his food supply. It is argued by the school of thought, headed by Professor Huntington, that the supposed periodic drying-up of Asia has produced a lack of food, and thus has caused the warlike nomadic peoples to move down into other countries to seek fresh pastures. In order to make it quite clear that nothing of the sort can ever be shown to have taken place I have included a map (No. 8) on which are indicated the movements of three such peoples. This map shows clearly what are really the incentives that animate these warlike peoples. They are not seeking food, but someone whom they may dominate. They have moved from gold-field to gold-field, imposing themselves as rulers on the peaceful sedentary agriculturalists whom they found there, until they have finally arrived in the Mecca of all warriors, India. As in other parts of the world, these warrior aristocracies cannot well be separated from the civilization on which they battered. Those who first opened up the trade route running by way of Barkul to China, going from one gold-field to another, hardly reckoned what some of the consequences of their enterprise would be.

This shows that the movements of warlike peoples are not dictated by fancy, but have

something purposive about them. The cause of these great movements of nomads in Asia is always the same. A great military leader arises in one of the small tribes: he manages to overcome his neighbours, who, for their own safety, ally themselves with him, and enable him to set out on greater conquests; finally, if he have the genius of Genghis Khan, Tamerlane, Attila, or any other outstanding leader, he manages to found a great empire. But when he dies the empire rapidly disintegrates, and the whole process begins once again. This process is the more easy for them, in that the sedentary irrigating population of central Asia is, and always has been, entirely peaceful. The fertile river valleys of Sogdiana, Bactria, and elsewhere have always been the prey of nomadic conquerors, their submissive population having to bow their necks constantly to some foreign yoke or other. It is thus not to be wondered at that we hear of the warlike nomadic peoples quartering themselves on the irrigating population. To say that Asia has been devoid of adequate pasturage is absurd; for, as Douglas Carruthers has shown in his work on *Unknown Mongolia*, there are thousands of square miles of fertile pasturage in Dzungaria that never have been tenanted by nomads or irrigators. The reason for the absence of the irrigators lies in the fact that, with one exception, none of the rivers contain gold; therefore no irrigators have settled there. Consequently the nomads, with no one to dominate,

have avoided the place, and have concentrated nearer to civilization.

The warlike nomads of Asia, like their counterparts in Europe, have always been a source of danger to the settled communities of Turkestan and China. The Chinese, as is well known, were protected to a certain extent by the great wall that they constructed in the third century B.C. But the peoples of central Asia had no such protection; consequently, the constant impact of barbarians, bent solely on conquest, and not bringing with them any new elements of culture, in time ruined many countries that formerly had been flourishing. The destruction of the water supply of a country that is entirely dependent on storage for its water is a very serious matter, as many a conqueror has known, and in this way many parts of central Asia, that formerly supported a flourishing population, are now desolate, owing to the activities of the warlike nomads. In the case of Asia there was no central civilization capable of resisting indefinitely the attacks from without, so the final result was decay and ruin.

The Turko-Tartar peoples were preceded in central Asia by Aryan-speaking peoples, who moved down into India at an uncertain date, which perhaps may be about 1000 B.C. They were pastoral nomads, bent entirely on cattle-rearing, but ruling over a class of cultivators, and therefore they were not so degraded in culture as some other nomadic peoples. These

146 THE GROWTH OF CIVILIZATION

cattle-breeders were certainly allied, formerly, to the irrigators of Persia, for they possessed a like language. Moreover, their culture when in India showed manifold traces of a change from a more highly developed stage, somewhat similar to that of the archaic civilization.

In time these Aryan-speaking rulers spread over a large part of India and gave rise to many ruling houses, such as the Rajputs. Their original settlements in the Panjab and the neighbouring parts of Afghanistan were in localities possessing supplies of gold, and, consequently, a civilized population, which shows that their movements, like those of the Yueh-Chi just described, were ultimately controlled by the existence of desired substances, and that these people were simply bent on domination. In culture they were much lower than the peoples of India whom they found in possession, with whom they ultimately united, more or less. They therefore present the same characteristics as warrior aristocracies elsewhere; they have degraded from a higher cultural condition, and they dominate peoples higher in culture than themselves.

In other parts of the world several instances of the movements of warlike military peoples could be described, and in every case their behaviour would exactly correspond to that of the Teutons, Celts, Turks, Tartars, or of any other warlike people that has already been described. One important instance is that of the Tai-Shan group, which descended from the

Chinese province of Yunnan about two thousand years ago and dominated the highly developed civilizations of Indo-China, and reduced the cultural level of that region in consequence. Yunnan is a boundary region both for China and for Further India, and the many polished stone implements that have been found there testify to the presence formerly of people of the archaic civilization, intent on exploiting its resources.

Africa has its warlike peoples, and they, in all cases, have swarmed out of regions with remains—usually megalithic, in the case of north-west Africa—of the archaic civilization, and have dominated the settled agricultural, peaceful peoples. The case of the Bantu is a notable one. They originated in the eastern highlands of East Africa—through the superposition of a pastoral ruling class of Hamitic stock, coming from the direction of Abyssinia—on a negro population, probably agricultural. Thence they have swarmed over the whole of Africa south of the Sudan, and have driven before them the Bushmen and Hottentots. Their case apparently is one of movement outward from civilization, though it is possible that the great mining centre of southern Rhodesia was an attractive force. The Bantu certainly derived the whole of their culture from more highly civilized sources, and the further north we go the nearer do their ideas and customs resemble those of ancient Egypt. It has been found, for instance, during the past thirty years or so that the people of Uganda, where

there are dolmens, have many customs, especially those connected with the royal family, that serve to throw much light on the meaning of early Egyptian ceremonies.

In America, likewise, there is also evidence that the outlying peoples have finally overcome the settled irrigating peoples of the first civilizations. In the case of Mexico, for instance, it is well known that there came down from the north successive groups of warlike peoples, who, just before the arrival of the Spaniards, had made themselves overlords of much of the country. The best known of these warlike peoples are the Aztecs, the rulers of Mexico city at the time of the Conquest. The culture of the Aztecs, like that of the Teutons and Turko-Tartars, shows every sign of derivation from that of the more highly civilized peoples whom they finally dominated.

Thus did the civilization of old produce a toxin that finally poisoned it.

CHAPTER VIII

THE THEORY OF DYNASTIC CONTINUITY

THE central thesis of this book is that the home of civilization is in the Ancient East, and particularly Egypt. From this small area all the food-producing communities of the world have, directly or indirectly, derived their culture. In some cases it is true that they have added to what they received, but generally culture has been lost in transmission.

In the case considered in the last chapter it was found that nomadic pastoral peoples of warlike habits had somehow or other developed on the outskirts of civilization, had swarmed down on the settled civilizations, had dominated them in most cases, and usually had reduced them in cultural level. These parasitic warlike communities owed all their culture, so far as can be seen, to the highly civilized peoples near whose borders they dwelt. This process of budding-off of warlike communities from more highly developed and more peaceful communities has gone on all over the world. Therefore there must be some common cause at work, and it is the business of this chapter to set out a theory to account for the facts.

We have seen that, so far as culture is concerned, there is a complete continuity between

the arts and crafts of the Celts and Teutons of Europe and those of the Mediterranean peoples. Since these warlike communities derived their material culture from that quarter, with the exception of their horse-riding habits, the question arises as to whether they derived other social institutions from the same source. It is well known that the Celts and the Teutons, so far as they concern us as mobile military peoples, were essentially military aristocracies ruling over peoples of greatly different origin. The Celts, for instance, never colonized Spain and southern France; they simply imposed themselves on the natives as their rulers. Similarly with warlike peoples in any part of the earth. The question that arises is this: What is the origin of these military aristocracies? Have they, like the rest of the civilization of the Celts and other warlike peoples, come from the ancient civilizations?

I think that it can be established beyond reasonable doubt that, all the world over, with the exception, of course, of the place where the institution originated, which, in my opinion, is Egypt, every ruling group has been derived from some pre-existing ruling group, that, in fact, a complete continuity runs through the whole of the class States of the world, from one end to the other. It sounds strange to think that the Mikado of Japan is related, ultimately, to the ruling groups of Europe and to the Pharaohs of Egypt, but such is, in my opinion, the truth of the matter. This is the

theory of *Dynastic Continuity*, to which the attention of the reader is directed.

It is perhaps useful in this case to begin with everyday knowledge, and to think of the condition of Europe in 1914, before the outbreak of war. We all know what is meant by royal birth—it needs no definition. When any prince or princess was to be married there was a limited group of families where a mate could be sought. All the ruling families of Europe were inter-related, our own royal house to the former rulers of Germany, the Hohenzollerns, who, in their turn, had kinsmen on the thrones of many European countries, Bulgaria, Greece, and so on. These ruling families therefore were spread over Europe as a network that had no reference to race. A Hohenzollern—that is to say, a Prussian of unknown, possibly Italian, origin—ruled over Slavs; in our own country a king of Teutonic origin ruled over Celts, Teutons, and peoples of Mediterranean stock; in a striking case, that of the former Austrian Empire, a great variety of races, Teutonic, Slav, Magyar, Mediterranean, were under one ruler. In Europe, therefore, there was unity of rulers and diversity of peoples. To know how any country got its ruling family, or how it came by its boundaries, a book of genealogical tables is the surest guide: ethnology can tell us but little. Racial types do not help in the study of European royal history; only a patient inquiry into the family ties of ruling families, and of the struggles for thrones which they have

so constantly engaged in, can give the clue to the solution. The extent and life of any State in the past has been mainly dependent on the continuance of the particular ruling family, so that the study of the origins of warlike States in Europe really is the same as that of the origins of royalty.

That being so, let us see what we can learn from history of the origins of ruling families. For this purpose it will be well to study the history of our own country. In his work on *The Origin of the English Nation*, Professor Chadwick gives a clear account of the manner by which the earliest known warlike States in Europe have developed. He insists throughout his work on the importance of royal blood as the essential factor in the foundation of States by the Anglo-Saxons and Jutes, and on the clear-cut contrast which existed in these States between rulers and commoners. He states that all the royal genealogies that have been kept—those of Kent, Wessex, Essex, East Anglia, Mercia, Lindsey, Deira, Bernicia—go back to gods, and thus lay claim to a distinction from the commoners. Usually descent is claimed from Odin, who himself is said to have come to Denmark from Persia, where he was a member of the royal family. It may sound strange to read of a “god” as a man, but, as is shown in *The Origin of Magic and Religion*, there is nothing extraordinary in this claim; on the contrary, it is a fact of the utmost importance to the thesis that I am sustaining.

It is useless to speak of the origins of royalty in Teutonic England, for no evidence exists to show that any of the ruling families sprang up in this country. The immigrants from Scandinavia seem to have come over under the leadership of their rulers. In this way we find England split up into a number of kingdoms that rest on no racial basis, but are simply the result of the parcelling-out of the country between the ruling group. It can be shown that the number of kingdoms depended on dynastic causes. For instance, the kingdom of Wessex was founded by members of the royal family of Sussex or Essex, who migrated and seized a tract of country in which to found a new State.

The mode of foundation of the Teutonic kingdoms in England is well known. It was a constant feature of the life of the Scandinavian States for warlike expeditions to set out, always led by young men of royal blood, who, in some cases, had to leave their homes on account of misdeeds. Born and bred to rule, it is natural that they should seek to carry on their profession, and a new kingdom resulted when they and their followers succeeded in their aim. Thus would come into existence a State, ruled over by a warlike king, with a military aristocracy founded by his followers. The native population, who usually went on with their agricultural and other occupations, played no part whatever in the life of the State.

The existence of ruling families in the home-

land of the Teutons stands beyond doubt. The founders of the Anglo-Saxon and Jutish kingdoms ultimately came from the present Denmark, Sweden, Norway, and North Germany. In that region, in the earliest times of which we have knowledge, kingly government existed practically everywhere. All the Teutonic peoples, with the exception of the Old Saxons, had ruling families. Scandinavian tradition knows no other form of government; the kingdom was bound up with the royal family, the claim to rule was based on divine descent, and, obviously, each king had to be descended from the founder of the throne (1).

From the region of Scandinavia and North Germany there swarmed off at various times peoples who governed the whole of Europe, who imposed themselves everywhere as ruling families. Such were the Goths, who split up into the Visigoths and Ostrogoths, the Lombards, the Burgundians and Normans. These wanderers had their own ruling families, with whom the fortunes of the nation were bound up. The history of the Goths is typical of all. "For three hundred years—beginning with the days of Tacitus—their history consists of little else than a dreary record of barbarian slaughter and pillage. A century later, the Goths have become the mightiest nation in Europe. One of their two kings sits on the throne of the Cæsars, the wisest and most beneficent ruler that Italy has known for ages; the other reigns over Spain and the richest parts of Gaul.

We look forward two hundred and fifty years and the Gothic kingdoms are no more: the nation itself has vanished from the stage of history, leaving scarcely a trace behind" (2). The only way, says Professor Chadwick, to account for this widespread extension of peoples hitherto unknown is to postulate a similar process to that which in the case of the Vikings and the Normans, and in the Sagas, gave rise to kingdoms in widely separated spots, namely, military expeditions led by men of royal blood (3). Such kingdoms as these had no racial basis: they were simply military States; and when the dynasty was wiped out the State disappeared, to be reconstituted by some fresh conqueror, or else to be divided up among other States.

The sudden disappearance of military States is the necessary corollary to their sudden appearance. Ebb and flow, flux and reflux, are the typical phenomena of the process. Yet a thread of continuity runs through the whole of the tangle. Wherever you find a ruling family in any of these States, that family will trace back its origins to some remote time in the past, to some other ruling family; it will never admit plebeian derivation, and it will be right in this repudiation. Since the expeditions were practically invariably led by men of royal blood, continuity of ruling families follows at once. Good evidence exists to show that men who were not born of royal blood have played a negligible part in the foundation of dynasties

in Europe. In one or two cases usurpers took possession of the crown of England, but at their death the legitimate royal family again came into its own. In like manner, when the ruling family of the Visigoths came to an end in Spain, several nobles tried to form a dynasty, but none succeeded.

Regarded thus in the light of the interplay of the various branches of the royal family that originated in Scandinavia, the rise and fall of Teutonic kingdoms in Europe is easy to understand. The process is independent of race and of the people in general, and the only thing that matters is royal blood.

Prior to the Teutons were the Celts, who are first heard of in central Europe. From the Celts the Teutons derived their words dealing with matters of royalty and warfare. This is suggestive of the derivation of the Teutonic ruling families from those of the Celts. Direct evidence on that point is lacking, unfortunately ; but the behaviour of the Celts during the fifth and fourth centuries B.C. entirely parallels that of the Teutons of later times. They spread with extreme rapidity, and even sent out processes as far as Asia Minor, which suggests warlike expeditions of the same nature as those of the Teutons. Indeed this form of behaviour is typical of the whole of the Aryan-speaking States, of Asia as well as of Europe. The Greek States rise and fall like those of the Teutons, and in all of them royalty is as definite if not more definite, than among ourselves.

It has already been said that the Celts owed much of their culture to the Greeks. This point has been much insisted on by Celtic scholars—for instance, M. d'Arbois de Joubainville, in his work on *Civilisation des Celtes et celle de l'épopée Homérique*. It is therefore interesting to see what ideas the Greeks had of the origin of their ruling families. This is doubly important, for when considering Greece we are in a country where the warlike peoples from the north came definitely into contact with Mediterranean civilization.

The Greeks trace their early ruling families to lands lying to the south, and especially to Egypt. Thus, we are told in Greek legend that Danaus, the founder of the royal family of Argos, came from Egypt. Moreover, this Danaus was supposed to have been the son of the king of Egypt and nephew of the king of Phœnicia, who was the brother of the king of Egypt. Thus the Greeks connected their earliest ruling family with those of Egypt and Phœnicia (1) (4). As is well known, Herodotus was convinced that the Greeks derived their gods from Egypt, and Lucian, in his work on the Syrian goddess, is of the same opinion. It is often said that Herodotus was so vastly impressed by the Egyptian priests that he believed their claim. But he had, at the same time, visited Babylonia, and had had full opportunities of studying the problem. Since cults of gods are in the hands of ruling families the world over, the double claims of the Greeks

that they derived both their ruling families and their gods from Egypt really corroborate each other, and make them still more probable.

An interesting instance of the possible derivation of rulers by the Greeks from the Mediterranean is that of the Herakleidæ, the kings of the Spartans, who were descended from Heracles, a hero who belonged to the Mediterranean.

It is possible to add still more support for the Greek contention that their ruling family was derived from Egypt; for, in what is called the Mycenæan Age, which lasted in Greece itself and roughly from 1500 B.C. to 1100 B.C., there were clear traces of Egyptian influence. As Sir Arthur Evans has pointed out, in his *Palace of Minos*, the Mycenæan civilization of mainland Greece was derived from Crete, and was far below it in cultural level. This form of culture first appears in Crete at the beginning of what is termed the Middle Minoan Age (*circ.* 2100 B.C.). As usual, this culture shows manifold traces of derivation from Egyptian sources. One of the most important items of evidence of this derivation lies in the form of grave in which the rulers of the Mycenæan Age were buried. These appeared in Crete in the Middle Minoan Age, and were obviously modelled on Egyptian pyramids of the Twelfth Dynasty, that is, of about the same time. What is more, models of mummies have been found in the Cretan examples; while in those of Greece itself the bodies were actually embalmed in honey. This certainly suggests the coming into the

Mediterranean of rulers closely connected with the Egyptian ruling family.

But it is possible to go still further. In his monograph on *Mycenæan Tree and Pillar Cult* Sir Arthur Evans has shown that this form of art is strongly impregnated with solar ideas, derived, he claims, from Egypt. This certainly seems to be correct, for it is in accordance with other lines of evidence. It is agreed that the appearance of the use of bronze in Europe was undoubtedly the result of some uniform influence, for the elements of culture that come in at the same time are too similar to have appeared in such widely separated places at about the same time as the result of independent origin. Along with bronze tools and daggers there came into Europe the use of solar symbols, hitherto unknown, a great use of gold for ornaments, obviously for the rulers, and a type of grave with a cupola tomb exactly like those of Middle Minoan Crete and Mycenæan Greece, and therefore modelled on Twelfth Dynasty Egyptian pyramids. This type of grave appeared in Sardinia, in south-east Spain, in France, at Maes Howe in the Orkneys, and at New Grange in Ireland. It consists of a beehive chamber of stone, approached by a passage with dry stone walls, the whole being covered by a great mound of earth or rubble.

The presence of vast graves undoubtedly means the coming to Europe of members of a ruling family, for no one else could build them. The use of solar symbols suggests that the

people responsible for these graves were sun-worshippers. Since, all the world over, the sun-cult has been an ancestor cult in the family of the Children of the Sun, who ruled Egypt, in one or other of their branches, for thousands of years, it would seem that these facts, when put together, mean that the Children of the Sun had begun to move out from Egypt, and had founded kingdoms in various parts of Europe, just as they had done while moving out to America (5). There certainly is good reason to believe in this movement, for the Celtic stories are full of these wonderful Children of the Sun, as also is Greek mythology. The evidence certainly suggests that the claim of the Greeks that their earliest rulers came from Egypt has much to be said for it. In fact, it is impossible to put forward any other cogent explanation of the facts.

Wherever the dynastic question can be examined continuity is found. The search for origins of ruling families in Europe only sends us further and further back into the past, until, if we simply follow the facts as they are given us, and do not speculate, we are led to Egypt. The Teutonic ruling families all go back to others; they show signs of having derived their ruling system from the Celts; the Celts have derived much from the Greeks and this may include their rulers; the Greeks claim that their ruling families first came from Egypt. In spite of woeful gaps in the evidence this is what seems to emerge from European history.

The resources of inquiry are not at an end. The historical investigation gives one result. Conclusions can be derived from the consideration of other lines of evidence. I wish to comment on one or two important facts that bear out the theory. In our own days the wearing of a sword on the part of a commissioned officer means that he has come into a kind of relationship with the king, the fountain of all honours: he is admitted into the sword-bearing class. Private soldiers and non-commissioned officers do not wear swords. This has been the case throughout European history. The sword has always been the mark of rank, and in the past it was only worn by men of noble birth (6). The story of the sword begins, in Egypt, with the triangular dagger, first of flint and then of copper, that was made by this people. A first dynasty stela has a triangular dagger marked on it, and this sign stands for "noble." The first weapons that can be detected in Europe are the bronze daggers that came in with the Bronze Age, at the time when the Children of the Sun were probably moving about in the Mediterranean. These bronze daggers are exactly like those made by the Egyptians in earlier times. In course of time the blade became lengthened, and the dagger turned into a sword. Its use was still confined to men of royal and noble birth. When the use of iron came in the new swords were simply copies of bronze swords. Thus the Celtic nobles had a weapon evidently derived from the

Egyptian dagger. The Celts and the Romans passed on their swords to the Teutons, and the early Teutonic swords were only worn by men of noble birth. Thus there is apparently a perfect continuity running down from Egypt to the present day in the fact that the wearing of swords, with certain slight extensions, as in the Middle Ages and in the case of cavalry, has always been mainly the prerogative of noble birth. This continuity enables us to jump gaps and to claim that the only theory that fits the facts is the theory of dynastic continuity—the theory that, from beginning to end of the series of sword-bearing ruling groups, there runs a thread of relationship.

The solution of the problem of dynastic spread in Europe is that suggested by the known history of the Teutonic dynasties. We have to do with expeditions, led by men of royal birth, and consisting of warlike followers, who set out from their homes and went into the surrounding countries to seek their fortunes. Having succeeded in founding a kingdom, often on a lower cultural plane than their homeland, they organized their new subjects on a military basis, and, in time, came down to ravage their homelands. The process is perfectly simple, and it accounts for all the facts as no other theory will.

The inquiry in Europe has led us back to Egypt, in which country it is possible to account for the origin of royalty. Before considering that matter it will be well to see that the theory

of dynastic continuity gains great support from other parts of the world.

At the other end of the vast region inhabited, at some time or other, by peoples speaking Aryan languages, there exists a large and important race the study of which will afford support for the theory of dynastic continuity. I refer to the Rajputs, the last surviving remnants of the old ruling groups of India. Their history runs on exactly similar lines to that of the Teutons : royal blood is everything, and the source of the claim to rule is descent from the founder of the dynasty. Many of their ruling families can trace back their lineage for several centuries. The Rajputs of Rajputana have founded many States on their boundaries by the simple process of the migration of members of a ruling family, who, with a few followers, have managed to impose themselves on a wandering tribe as their rulers. In this way there has been produced, as was shown by Sir Alfred Lyall in his *Asiatic Studies*, a perfect network of communities, all linked together by dynastic ties. This is the way by which peoples of the lower culture have derived their ruling families, that is to say, not by segregation from within the community, but by imposition from without. The Rajputs are probably members of the great ruling caste of India of former times, the two branches of which, the Solar and Lunar races, existed when the *Puranas* and the *Mahabharata* were written (7). These books, especially the *Puranas*, con-

tain many tables of descent, and a recent writer has asserted that these tables are mainly true ; for the facts given there about the origins of cities agree so well with the known distribution of States in northern India in ancient times as to provide ample confirmation of their reliability. It is true that usurpers have arisen, and have fabricated genealogies to support their claims to the throne, but these forgeries have not gained common acceptance ; and, as is argued, such practices only presuppose the existence of royal birth as the foundation of the claim to rule, the desire for recognition forcing usurpers to create an ancestry.

A remarkable instance of dynastic continuity is afforded by the great group of "Turko-Tartar" peoples, who first appeared on the scene of history in countries bordering on China. Professor Parker and Sir Henry Howorth, among others, have shown how one tribe had budded from the original stem to produce apparently distinct peoples. Professor Parker is of the opinion that all the ruling houses of this great group are ultimately derived from one original stem ; and he states that, in the case of the best-known tribe, the Hiung-Nu, the ancestors of the Huns of Europe, there is no mention during the period of a thousand years during which we know of them, of the succession ever having gone out of the direct line of descent (8). Of recent years a discovery has been made which entirely substantiates the conclusions of Professor Parker.

Professor Hirth has found that in the case of the Huns the ancestors of their great leader, Attila, can be traced back probably to the thirteenth century B.C., and certainly to the sixth century B.C. He found in an old Hungarian manuscript a list of names of Attila's ancestors that agreed so closely with those in a Chinese list of rulers of the Hiung-Nu that there was no doubt of their identity. The Chinese list dated back to the sixth century B.C. (9). In the case of China itself, Professor Parker states that the historic dynasties all formed part of the same family, giving a continuity of thousands of years (10). Moreover, there is possibly a connexion between the Chinese dynasties and those of the Hiung-Nu, for these Tartars claim that their dynasty was founded by a Chinese official of high—that is, royal—rank, who went to live among them, just as members of Rajput families have consolidated barbaric tribes in India. This story may not be true, for the Chinese themselves deny it; but there are plenty of cases in which members of Chinese royal families have gone out to rule barbarians and have adopted their customs; the Chinese, indeed, make the claim with respect to most of the neighbouring kingdoms.

One of the most perfect—if not, at present, the most perfect—instances of dynastic continuity, is that of the Polynesians. This great group of peoples has spread from India right out across the Pacific as far as Easter Island,

over an enormous area, and the journey has taken many centuries to accomplish. In spite of the many vicissitudes that this great family has undergone, the threads of continuity have been retained apparently unbroken. It is not possible to go back as far as in China, for Polynesian records only reach to about A.D. 600; but their perfect reliability is a most striking phenomenon—one that impresses the student forcibly with the notion of continuity of ruling groups.

Polynesian traditions go back to Samoa, which, together with Fiji and Tonga, was the point whence were derived the colonizers of the eastern Pacific (see Sketch Map No. 7). Prior to their arrival in Samoa practically nothing is known of the actual history of the Polynesian ruling groups, but indirect evidence points to their continuous derivation from pre-existing ruling groups of like order. Men from Samoa sailed across the ocean and colonized Tahiti and its neighbourhood; which, in turn, became a fresh centre of dispersal, whence migrations went to Rarotonga, and thence to New Zealand. Another movement took place from Tahiti to Hawaii (11).

One significant feature of Polynesian life is the importance placed on the study of genealogical tables, which recount the ancestry of the ruling groups of the islands. These have been recorded on a large scale by the members of the Polynesian Society and by various other students, and a large mass of material makes it

possible to learn much of the dynastic history of the Polynesians. It was formerly part—and an important part—of the education of noble youths to learn their ancestral tables for many generations. In that way a young Maori noble of New Zealand would know his ancestral table up to the time when his forefathers came from Rarotonga in a canoe—just as some of our noble families delight to recount that their ancestors came over with the Conqueror—and beyond that. He would know the names of his ancestors who lived in Rarotonga, and also in Tahiti. Similarly, the nobility of Hawaii would know their ancestry in Tahiti and perhaps in Samoa.

This traditional lore affords a precise means of controlling Polynesian traditions of travel; for if the Maori ruling families were derived from those of Rarotonga, it should be possible, by reference to the Rarotongan tables, to see if the reputed Rarotongan ancestry of the Maori nobility actually existed, just as it is possible to compare two records of Attila's ancestry, one in Europe and the other in China, made by recorders who certainly know nothing of each other. It is found, on comparison, that the reputed Rarotongan ancestry of the Maori does, in fact, agree with the Rarotongan records; also that, going further back, the Tahitian royal families had members who appear in the early parts of the Maori tables. Similarly with Hawaii: it is never found that any insuperable gap exists in the tables. Since

this precise correspondence exists so far back as the records reach, it is to be presumed that, were further records available, it would be found to hold between the first settlements of Samoa and those further west, say in Ponape, and so on into India, and further back into Egypt. There is no logical reason against the adoption of this view, and, indeed, many reasons exist for its acceptance besides those already adduced.

It may perhaps weary the reader to find insistence laid on group after group of peoples who all seem to have been descended from a common stock; but it is essential that this point should be grasped, and its ultimate significance realized. I do not intend to exhaust the possibilities, but will bring forward two more instances, and then shall proceed to lay down some generalizations that serve to bring all these facts into focus.

Although the great Bantu family of peoples in Africa are spread over a great extent of country there is reason to believe that they originally sprang from one or more groups in the eastern highlands (Sketch Map No. 7). To quote the words of one authority only, Mr. D. F. Ellenberger, the author of *The History of the Basuto*: "It may be taken for certain . . . that all the Bantu tribes come from one common source. The differences which exist between them to-day, in respect of type and language, may be attributed to various causes: such, for instance, as intercourse with other peoples,

Bushmen, Hottentots, etc., as well as to circumstance and environment. But all have, in the main, the same usages and customs, the same form of government, the same or similar weapons, and many similar superstitions, such as the worship of ancestors" (page xx).

The Bantu have migrated from north to south, and in the north there is no doubt that the institution of ruling groups is more definite than in the south. There is no hope, therefore, of discovering the origin of this institution among the Bantu: rather does it degrade as time goes on and the movement spreads southwards.

The last instance that I wish to adduce is well known to us all, namely, that of the tables of descent of Noah. The sons of Noah are said to have given rise to various races, which in their turn gave rise to others, and to cities. The diversity of language and of physical type among all these peoples has made this claim to common origin appear strange to modern students, and more than one alternative reading has been given to the tradition. For instance, Gunkel says, in his *Commentary on Genesis*, speaking of this table of descent: "What are we to say of this table of nations? The first impression on the modern unprejudiced reader must be strange. It is as if one should say, the sons of Germanus are Germany, England, and Scandinavia; Germany produced Saxony, Swabia, France, Bavaria; Saxony produced

Hanover, Brunswick, and Hamburg " (page 85). But is not this exactly what would happen if a future historian got hold of a garbled version of the fact that the royal families of Europe were descended from one common stock? The first home of the Teutonic peoples that we know of was Scandinavia. So we may say, Scandinavia produced Jutland, Germany, Saxony, and so on; Saxony produced Sussex, Essex, and Wessex. The Goths could be made to descend from Goth, the son of Scan; his sons would be Ostrogoth and Visigoth; the sons of Visigoth would be France, Spain, and Africa, and so forth. In this way the spread of the ruling families of Scandinavia could be set out by naming the various States founded by the wandering bands, and, what is more, the States would be identified with the ruling groups. Thus the table of Noah's sons could be exactly paralleled among European peoples. This parallel would remove the chief difficulty of the commentators—that of race, for Teutonic dynasties ruled over peoples of the most varied races—Mediterranean, Teutonic, Slavonic, and Magyar—who spoke different languages. There is thus no difficulty in the way of accepting the account as representing vaguely some historic process, if the movement be accepted as being one of aristocracies and not of peoples. The text of the Old Testament seems to show that we are really dealing with men of royal birth. For example, Jahweh said to Abram, "I will make of thee a great nation. . . . I will make

nations of thee and kings shall come out of thee" (Gen. ix. 2; xvii. 6). Of Sarah, his wife, it is written, "She shall be a mother of nations: kings of people shall be of her" (Gen. xvii. 6). Ishmael, son of Abram's concubine, is the father of ruling families: "These are the sons of Ishmael, and these are their names, by their towns, and by their castles, twelve princes according to their nations" (Gen. xxv. 16). Esau was the "ancestor" of the Edomites, but it is clear that he really was the founder of their ruling group, and not of the people themselves, for all his descendants are mentioned as kings (Gen. xxxvi.). When Abram is said to be the father of many nations it really seems to mean that his descendants will rule over diverse peoples. When he is promised that his seed shall have the land from the river of Egypt to the Euphrates, including all manner of peoples, it apparently means that his descendants shall rule over these peoples and possess them (Gen. xv. 18-21). The reception given to Abram by kings shows likewise that he was a member of a royal family.

It is now time to advance from these separate cases to a general theorem. If what has been said in this chapter be true, it is evident that the problem, in the case of the Teutonic, Celtic, and, finally, of the whole of the Aryan-speaking group of ruling families probably reduces down to that of one original family, which, by sending out processes in the manner described, has produced an immense proliferation of ruling

families, which have brought into being a network of States, all of them connected, not by any racial ties, but through their rulers. When we deal with historical examples, such as in the case of the Aryan-speaking peoples, or the Bantu, or the Turko-Tartar group, or the Polynesians, we are dealing with peoples who have emerged from certain origin centres, where there are signs of a former civilization. This former civilization is, generally speaking, of a like kind in all parts of the world; it is the archaic civilization already discussed in the last chapter—a civilization characterized by the building of megalithic monuments, the use of polished stone implements, irrigation, and so forth. Its ruling family was, as has been seen, in two divisions, one part consisting of the Children of the Sun, incarnate deities; the other consisting of a landed nobility, connected with the under-world, who looked after the civil administration of the country, and acted as war-lords. One peculiar feature of this early ruling group was its form of succession. The heir to the throne was not the son of the king, but, in the first place, his brother; and, when he died, the son of the eldest sister. That is to say, the succession to the throne was matrilineal. If the ruling groups just considered have emerged from this older form of society there should be some traces among them of a change from matrilineal to patrilineal institutions.

This evidence is readily forthcoming. Pro-

fessor Chadwick, in *The Heroic Age* (page 346), states distinctly that this transition took place : " No doubt on the whole the agnatic [i.e. patrilineal] system of relationship had become predominant almost everywhere in the Heroic Age ; but sufficient traces of the opposite system remain to render it probable that a change had taken place not so very far back." Again he says, in the case of Gaul : " In the earliest Gaulish tradition of which we have record the title to sovereignty seems to go, as among the Picts, to the sons of the sister " (page 428). This is a common phenomenon. The claim to a former system of mother-right has been made in the case of practically every country of Europe.

It is found, in all the cases of wandering military aristocracies, that the change from mother-right to father-right took place shortly after the migrations began. This is urged, for instance, by Robertson Smith, in his work on *Kinship and Marriage*, in the case of the Arab tribes who emerged from Yemen. He says that, at the beginning of the movement, descent was matrilineal ; but, as he argues throughout the book, these peoples became patrilineal in the course of their wanderings, and he remarks that " the period of the Yemenite migrations lies within a very few generations of the ultimate victory of male kinship. That victory probably came fast " (page 273). There is likewise evidence of a transition from mother-right to father-right in the Old Testament,

for some of the tables of descent are matrilineal, while others are patrilineal (12).

My friend Dr. Alphonse Mingana, of the John Rylands' Library, Manchester, tells me that the genealogies of the Turks and Tartars go back to women, which is a sign of the former existence among them of mother-right. This case is like that of the Lombards, who traced their descent to a queen in Scandinavia.

One of the best instances of a transition from matrilineal to patrilineal institutions is that of the Polynesians. We have clear evidence of the former existence among them of matrilineal succession, but in later times this has become patrilineal (13). The Bantu tribes, again, are matrilineal in those places situated near their homelands. In North America it can be shown that a transition has taken place from matrilineal to patrilineal institutions.

All the world over, therefore, a transition has taken place among ruling groups from mother-right to father-right. Royal families have, for some reason or other, changed their mode of descent and succession so as to allow the sons of kings to succeed them on the throne. Mother-right was the ruling mode in the earliest civilization, so far as our evidence takes us. Therefore the warrior dynasties that swarmed out of the origin centres trace back their descent into the early matrilineal civilization, which formerly spread over the whole world. Since, as has been urged, these great groups of families seem

originally each to have sprung from single families, the problem has been reduced considerably in dimensions. From small beginnings a vast ramification can proceed, and this is undoubtedly what has happened in the case of the ruling groups of the earth. Far from inquiry leading back into primitive times, when culture was on a low plane, it takes us back into the highly developed civilization of antiquity. The picture presented to us, therefore, is that of an original ruling group, characterized by mother-right, spreading all over the world, and in time giving rise to other ruling groups which are lower in culture, patrilineal in institutions, and pastoral by occupation. From these later groups have been developed most of the present ruling families of the world. Sometimes, as in the case of the Mikados of Japan, the former ruling group still persists; and in their case it is certain that mother-right was formerly the rule.

It would be possible to construct more than one bridge to link up the two groups of ruling families—those with mother-right and those with father-right. One of the most interesting of these connecting-links is that of the use of ensigns. From the earliest times in Egypt the different territorial divisions were distinguished by certain signs. As this civilization spread out of Egypt the use of ensigns went with it, and so the ruling groups of the whole region from India to America were in the habit of using similar emblems. We read, in the

Mahabharata of India, of great gatherings of rulers, each with their banner inscribed with some device—a boar, lion or eagle, and so forth. In the Bugi States of southern Celebes there is the same custom. It exists among the Bantu tribes of Africa, in North America; it formerly existed among the Israelites and the Arabs. The Japanese nobility, the Rajputs, and hosts of other ruling groups have adopted this custom. In later times in Europe the use of hereditary emblems seems to have fallen into decay, but among the early Teutonic rulers the custom was in full swing. In the old Scandinavian kingdoms the king, who was a high priest, claimed descent from the great goddess Freya, who was connected with the boar. In consequence of this he wore the boar as a crest. Tacitus says of the Æstii: “They worship the mother of the gods. The distinguishing mark of their cult is that they wear the shapes of wild boars. This serves for armour and for a protection in all things, rendering the worshipper of the goddess safe even among foes.” The use of the boar as an emblem by the Teutons is interesting, in view of the fact that the Celts also used the same emblem. Since the use of the boar signified, in the case of the early Teutonic kings, descent from the mother goddess it would seem that the Teutonic rulers really belonged to the same family as the Celtic rulers, which has already been suggested.

Another reason can be assigned for the belief in a continuity of ruling groups from the

beginnings of this institution right down to modern times in all parts of the earth. It can be shown, in all parts of the world, that cults of gods are primarily ancestor cults maintained by members of ruling groups. There is no reason whatever to believe that men have imagined gods and then have worshipped them. The idea of deity has grown up with civilization itself, and in its beginnings it was constructed out of the most homely of materials. The earliest ruling groups were closely bound up with the idea of deity, and in course of time kings in Egypt came to be regarded as incarnate deities. Thus the Children of the Sun, who went all over the world and founded the States of the archaic civilization, were sons of the sun-god, born of a theogamy and not of the union of mortals.

Given that the rulers of the earliest civilizations in all parts of the earth were "gods," it would follow that their descendants would also claim either to be divine or to be of divine descent. This is what actually occurs. In the case of the Anglo-Saxon kings of England descent from Odin is claimed. Odin is at one time a king and a war-god. In this he is exactly similar to the founders of ruling houses in other parts of the world. He can be compared to Oro, or Rongo, the great war-god of the eastern Pacific, the ancestor of the ruling houses of Tahiti, himself born of a theogamy, and thus of the same nature as the kings of the archaic civilization. Similarly with Huit-

zilopochtli. Throughout India a similar claim is made on the part of ruling groups: they always assert that their first ancestor was a "god." So he was; he was a member of the great family of The Children of the Sun; his father was a god, so therefore he partook of the divine nature more than ordinary men.

Thus the claim put forward in all parts of the earth by ruling families, that they are descended from "gods," is yet another proof of their essential unity. It can be shown that commoners pay practically no attention to cults of gods; they leave all that to the hereditary priesthood, the more important members of which belong to the rulers. The religious system is in the hands of the ruling class. Therefore, when a movement of culture takes place, the ruling group takes its cults with it, and the commoners accept this cult without bothering their heads much about the matter. Therefore any ruling group with cults of gods must have been derived from some other ruling group. There is no reason whatever to believe that ruling groups have independently, in all parts of the world, come to elaborate religious systems, and then to proclaim their divine descent.

The "god" ancestor is someone with whom it is possible to become very familiar by studying the archaic civilization. As inquiry is pushed farther back in history it arrives, not at the humble beginnings of royalty, but at its apotheosis. The earliest kings of the archaic

civilization were incarnate gods, men at the summit of human power and prestige, the like of which the world has never since seen. Therefore when kings such as those who ruled over the Angles and Saxons claimed to be descended from a king who was a god, they were claiming descent from a member of the ruling families of communities of the archaic civilization; they were claiming relationship, ultimately, with the kings of Egypt. As we have seen, there is good reason for them to make this claim. So also in the case of any other claim to descent from divine warrior kings. This claim is made universally, because warrior kings have, the world over, descended in that manner. It would indeed be curious if this claim were not put forward.

All paths of inquiry lead to the same goal. The only theory that can be framed from the facts is that of continuity. Only by concluding that the process that can be watched in so many cases is of universal application can any harmony be produced in the apparent chaos of facts. The facts afford no reason for believing anything else.

CHAPTER IX

THE CLASS SYSTEM

THE societies that have been considered in the last chapter were what may be termed *Class States*. Our own country is a typical instance. It contains, theoretically, two distinct classes, and the further back we go the more distinct do they become; for the community is divided into two classes: those who are entitled to use emblems—those who are noble by birth—and the commoners. Although it is possible to show, in many cases, that noble families have sprung from commoners, yet the institution of a ruling group has persisted ever since we have any knowledge. Inquiry has shown us that this system of the class state, far from being of spontaneous origin in various parts of the earth, is the result of a uniform process, that of the spread of ruling groups. It is to the general consideration of this process that attention is now to be directed.

The most primitive communities of which we have knowledge, the food-gatherers, have no class system. They consist of family groups, the members of which are bound together by ties of relationship. They live in juxtaposition to other family groups, their hunting grounds adjoin, but they do not intermingle. This is

the fundamental form of human society. The problem that faces us at the present is to understand how superposition ever came to pass, how one family group came to achieve a position of superiority over the other family groups. The study of the facts adduced in the last chapter affords no hope of solution on the lines of a gradual segregation, all the world over, of certain families from the mass of the community, on account of their superiority. Instead of going back to times when the rulers were just emerging from the mass of the community, and gradually consolidating their power, we find that, on the contrary, the earliest ruling families were entirely distinct from the rest of the community: they were even, in some cases, incarnate deities.

Since all signs point to Egypt as being the homeland of civilization, it is to that country that we turn first for signs of the beginnings of royalty. What was there in the conditions existing in early times in Egypt that caused the mass of the people to accept some family as their rulers? What possible reason could there be for such a social revolution?

Elliot Smith was the first to point the way to the solution of this problem. He has shown that the earliest kings—and this holds good of all parts of the world, Egypt, Sumer, India, Mexico, Peru, and so on—were intimately associated with the ceremonial connected with food supply. The Egyptians lived by means of irrigation, and this involved the manipula-

tion of a large water supply, with an intricate system of canals. Elliot Smith suggests that the kingship arose in connexion with the maintenance of this irrigation system. In this he is probably right. But it may be that his reasons do not represent the exact truth. Elliot Smith maintains that the man who first devised and controlled the system became the first ruler; he seized power and maintained it; he organized the labour of the community to work the irrigation system (1).

This explanation is not very satisfactory. It seems to leave out of count the fact that the beginnings of irrigation would take place in a very scattered community, and a dense population would not at first be present. The technique of water control would develop with the population, and there is no reason to believe that this would necessitate any other governing factor than the council of the village or larger group. Plenty of communities nowadays manage vast irrigation systems in this way: this is so with the Bontoc and other tribes of the Philippines, of the Pueblo Indians of New Mexico and Arizona, as well as of the village communes of France and Spain, whose customary law goes back to an unknown past.

The agricultural operations of the ancient Egyptians depended on the Nile flood. Irrigation channels, and reservoirs for water, had to be prepared before the time of rise of the river. So a means of counting time was of the utmost importance to them. The Egyp-

tians had at an early date elaborated a calendar for this purpose, and thereby had performed a very great service to mankind. It is in connexion with the elaboration of a calendar, a work demanding great ability, that, in my opinion, the kingship came into being.

Certain events that happened in Egypt suggest that this is the proper explanation of the facts (2). The Children of the Sun, who came into power at the beginning of the Fifth Dynasty, belonged to Heliopolis, the place where the solar, or Sothic calendar was invented. This calendar in time displaced the older calendar, which was lunar, and therefore much more cumbersome. The rulers of Heliopolis also invented the first Nilometer. Thus they performed signal services to Egypt. It seems to be more than a coincidence that the throne should have been gained by a family that belonged to a place where the solar calendar was invented. It suggests that the earlier ruling group had got into power by the invention of the lunar calendar. We know that the ruling family of Egypt, before the coming to power of the Children of the Sun in the Fifth Dynasty, was connected with the moon; we know, further, that it was intimately associated with irrigation, and that the priests had control of observations connected with the calendar.

Imagine what a service was rendered to the Egyptians by the man who discovered that by observing the movements of the moon it was possible to give precise warning of the on-

coming flood of the Nile. Once the flood came all operations must cease. Canals, basins, and so on, had to be prepared in readiness for the great flood. Once the year was fixed men had a great control over their fate, and they could prepare for the season's work. It is reasonable to assume that the man who made this great discovery would be maintained by the community, in return for the services that he performed in making astronomical observations in connexion with the calendar. The foundation of the first ruling group would thus be the direct result of what is certainly one of the greatest intellectual feats ever accomplished—the formulation of a calendar. Throughout the world the ruling classes of the oldest civilizations have been directly associated with the calendar. The astronomer royal of Babylon had to send each day to the king a report of the position of the heavenly bodies. Again, the Chinese ascribed the calendar to their first alleged emperor, Fu-hi, who also introduced sacrifices to the gods. The early ruling families of Mexico and elsewhere were closely associated with the calendar.

Whatever opinion be held with regard to this view of the origin of ruling families, there is no doubt that the earliest rulers were intimately concerned with the life of the community, and that they performed functions that, in the opinion of their subjects, were of direct importance to the welfare of the whole community. The whole of the ceremonial that

was supposed to assure the growth of crops, the fertility of animals, and so on, was in their hands, and their chief function was, in the beginning, centred round such matters.

In the course of time the ruling group began to constitute a definite class, distinct from the rest of the community. A vested interest arose, and, as in the case of every such vested interest, it began to consolidate its own position and to acquire power for itself. The class system soon emerged. Thus we find in Egypt, by the time of the Fifth Dynasty, the rulers had so far distinguished themselves from the commoners that they had come to claim divine birth: they were the Sons of the Sun, they were mummified at death, while their subjects, with the exception of some favoured nobles, were buried in the ordinary way. The kings went, after death, to the sky, while their subjects went underground. In these and in many other ways did they mark themselves off from the rest of the community.

When the move out from Egypt took place, it is evident that members of both classes must have emigrated. For in the communities of the archaic civilization, that can be examined in various places, the organization of Egypt of the Pyramid Age is reproduced more or less faithfully. The Children of the Sun are the rulers; there is a class of nobles; and below them—vastly below them in culture—come the commoners. This holds in a long line of settlements running from India to America. Since

so great a gap exists between the two classes of these communities, the rulers and the commoners, it is inconceivable that a class State, such as is found, say, in Ponape or old Samoa, could have been the result of anything but direct transmission. For instance, the family of the Children of the Sun must, from one end of the world to the other, have been related. It is inconceivable, to me at least, that commoners could go from a place such as Ponape to Samoa, and there set themselves up as the Children of the Sun. That would involve too much; it would mean that they would believe that they went, after death, to the sky, instead of to the under-world, as their ancestors had done, to a place with which they had no connexion whatever; they would have to attempt the practice of mummification; they would have to reconstitute a vast ritual connected with the sun-cult, of which they had been entirely ignorant. It is incredible that the commoners could have done these things. All that we know of the process goes to show that the class system has been handed on from one community to the other the whole world over, that in no case, with the exception of the place of origin of the system, Egypt itself, has it sprung up spontaneously.

Since food-producing communities have, the world over, been practically invariably founded on the class system, it follows that when we think of a "State" as a reality we are deceiving ourselves. Any given class State is simply a

temporary expression of the underlying class system. I mean that the actual configuration of a country and the constitution of the State is the result of forces working within the ruling group, and is not inherent in the country itself, or in its population. It was urged, in an earlier chapter, that the settlements of the people of the archaic civilization were made in places where they found what they sought—gold, pearls, and so forth. The seekers settled there and amalgamated with the food-gathering natives to form a class State, of which the noble members of the wanderers formed the ruling family. The two fundamental elements in the situation were the desired substances and the class system: together they produced the States of Mexico, Costa Rica, Peru, and so forth. These States were in themselves but the expression of something else, and they really did not form entities.

It is certainly true that, in the case of the earliest class States, those, say, of Egypt and Sumer, the class system was but a secondary phenomenon; and that, as this system spread over the earth, the constitution of the State was transported bodily, so that members of all classes were taken. Such States could therefore be called national States, and the ruling group would perform functions that were held to be necessary for the general well-being of the community. This is true for the States of the archaic civilization. But when class States were formed by the wanderers who set

out from these communities a very different condition of affairs is seen to result. These wandering bands simply went from one place to another, and, wherever possible, imposed themselves as a ruling class. They performed no national functions at all, and simply ruled as conquerors. When such States as these are considered, it is patent that any attempt to form a valid concept of them is almost impossible. The study of European history throughout the centuries reveals a constant flux of States, boundaries constantly changing, and whole bodies of peoples being transferred from one sway to another. The consequence is that, at one time, peoples of different race will be ruled over by the same king, while peoples of the same race will be ruled over by different kings. In every State there will be two distinct classes, with absolutely different social traditions, and consequently quite divergent attitudes towards many problems, such, for instance, as those concerning the relations between States.

When, therefore, we talk of any State founded in such a manner, we should be extremely careful to define what we mean. It is evidently only by ignoring the fact that there are two distinct classes in these States, and confining attention to the ruling group, that any coherence of thought can be attained. But, in so doing, the existence of the mass of the community has to be ignored. It is certainly true that, in certain circumstances, some appear-

ance of unity can be induced in a community with the class system, but such sporadic instances do not hide the fact that we cannot for a moment speak of such a State as a personality, and at the same time speak sense. The class States of the world owe their personality, in so far as they possess them, to certain accidental circumstances. They are not the result of any racial differences, nor of climatic or geographical factors. They are simply, in the last analysis, the consequences of dynastic processes, of the struggles of ruling groups for domination over native populations; that is to say, the reality at the back of the process of formation of States is the class system. This is true for the world as a whole. Consider the map of Europe at any time, say in the fourteenth century; then again in the fifteenth century. It has changed. States have enlarged their boundaries, others have disappeared. But the class system is still there, and has been there ever since there is any knowledge of such communities. It is true, of course, that in the process of time such States have often become "national," as the result of the possession of a common body of tradition, but that does not obscure the nature of the main process at work.

Any particular class State is simply the expression, more or less temporary, of the class system. It is the result of the superposition of a ruling group over a native population, the process of superposition differing according to

circumstances. So, when speaking of any State, extreme care must be taken that the concept is true, and is not the result of the confusion of a part with the whole. This tendency, woefully common as it is, of forming some concept of a class State as constituting some sort of personality is dangerous in the extreme, for it obscures the ultimate reality that underlies all class States, namely, the institution of classes.

CHAPTER X

THE ORIGIN AND DEVELOPMENT OF WAR

IN this chapter I wish to urge that warfare, in the sense of organized violent behaviour between communities, is not an essential feature of human society. I claim that it grew up along with the class State, in consequence of the development of certain social institutions, particularly the class system. It will not be possible to do more here than to sketch some of the broad historical features of practice, the full consideration of which will have to be reserved for some future occasion.

What do we know about man's violent behaviour? It is too commonly assumed that violent behaviour is "natural" to men, in that they will infallibly exhibit it, to a greater or less degree, in their ordinary daily intercourse, unless restraining influences are at work. The notion of a community where any sort of violence was practically unknown would sound absurd to most of us. We are apt to think that "civilization" has tamed the "savage," that it has imposed restraints on his violent tendencies, without inquiring as to whether this really is the case.

I am convinced that this is one of the most

profound mistakes that can be made, and that, until this error is eliminated from current thought, there is little hope for any solution of the greatest problem that confronts us as civilized men and women, namely, the elimination of violence from the relations between States, and, indeed, from all human relationships. It is certainly true that the relations between States have been violent for very many centuries in Europe; and from this men have argued that war must always be, unless some means are devised of restraining the "pugnacious tendencies" of men.

Suppose it were to be suggested that, far from civilization having tamed the savage, it has made man into a "savage," into a being who has learned modes of violent conduct entirely unknown to his forerunners. Suppose it be suggested that, as civilization has developed from its most primitive stages, mankind has been educated in cruelty as well as in other ways. An argument such as this, which seems to turn thought upside down, to reverse our current conceptions of the meaning of what we term "Civilization," will have to be supported by many facts if it is to gain any hearing. Yet I submit that this contention is sound, and that all we know of history goes to support it.

In the study of human behaviour, especially when that study is approached from the standpoint of our western European States, with their long and chequered history of war, it is extremely difficult to distinguish cause from

effect. Take, for instance, the expression of anger in young children. Is it true that an infant when in any way thwarted will evince anger, and start to make violent attempts to get its own way? May it not be that it is reacting to the recollection of a former experience when, for example, it had been slapped by an angry mother, or had observed the process in the case of an elder brother or sister? Children are imitative to a degree that is hardly realized, except by those who have carefully observed their daily life, and taken particular note of the way in which they build up their world of thought and conduct. Of course, it may be that children, who, after all, have not attained their full mental stature, whose brains are not yet fully developed, do behave in unrestrained ways; but that is no argument concerning the behaviour of the adult. We cannot be too careful when discussing the problem of violent behaviour in determining cause and effect.

There are undoubtedly many who, while agreeing that violent relations between communities may have been uncommon in the early stages of civilization, would insist that violence may always have characterized personal relations. Men will fight for a wife, they may say, or for some other good reason; some violent expression of anger must always have been exhibited.

It is dangerous to dogmatize about such a matter as this. But reason can be adduced

for the contention that formerly violent behaviour must have been practically non-existent in human society ; that is to say, the relations, not only of communities, but of individuals, must have been predominantly peaceful.

What is the meaning of this contention ? Simply this : that instead of imagining that man has had to restrain certain innate violent tendencies that drove him on to his destruction, we have to imagine that he has, owing to a faulty development in some of the institutions that he has elaborated, altered his conduct as the result of strains and stresses set up in him by social disharmonies. This contention is, *a priori*, just as sound as its opposite, which asserts that certain institutions have restrained man and taught him decent behaviour. The problem that we are called upon to solve is this : Is violent behaviour the result of social forces, or have social forces tended to prevent it ?

The only course is to appeal to the facts. We have a vast range of human society from which to choose instances, and we can control our reasoning strictly, owing to the knowledge that we possess of the sequence of various types of culture. When inquiry is made at the beginning, when the food-gatherers of the earth are examined, a remarkable result follows. Instead of spending their days fighting, these people, one and all, live peaceful lives when left undisturbed. They use no violence in their personal relations, and they do not fight as

communities (1). The unanimity with which men and women who have lived among such peoples, and know them well, testify to their honesty, their fidelity to the marriage tie, their kind treatment of children, their respect for the old, and their peaceful behaviour in all their relationships, is one of the most striking phenomena of ethnology.

When confronted with facts drawn from every part of the globe, from all the food-gathering communities already mentioned (see page 6), it would seem that peaceful behaviour is really typical of mankind when living simple lives such as those of the food-gatherers. If that be accepted, it follows that man must somehow or other have become warlike as human culture developed.

The prehistoric food-gatherers of Europe—the men of the Old Stone Age—do not seem to have been very concerned with combat. They do not appear to have made weapons of stone. They may, of course, have made them of wood; but it is hardly likely that, since they were such masters of stone-working, they would have failed to make serviceable weapons for combat if they needed them. The only possible exception is found in the Solutrean period, the implements of which may possibly have been spear-heads. It is more probable, however, that, as in Egypt, they were knives and scrapers. In the Magdalenian stage, where bone harpoons comprise the bulk of the equipment, together with flint flakes for art and industry,

the unwarlike habits of the food-gatherers are patent. When it is remembered how that, once fighting really began in Europe, in the Bronze Age, weapons soon developed, and hereafter took an important place in industry, this lack of weapons is significant.

Not only does the Old Stone Age fail to reveal any definite signs of weapons, but the earliest of the pre-dynastic Egyptians also evidently were peaceful. They made maces, which may or may not have been weapons, but very few of them have been found in their graves. Similarly, the first settlements at Susa and Anau have yielded evidence that the people were peaceful.

Are we thus to look back into a Golden Age of peace, when violence was practically absent from human relations? I see no other interpretation of the facts. It may be admitted that occasional violence was present, but it certainly was not enough to cause men to make special weapons for the purpose of fighting, as they did later on.

When historical times in the Ancient East are considered, it can be shown that mankind underwent a gradual process of education in warfare. The earliest accounts of fighting in Egypt are those connected with the Followers of Horus, who were, at the end of the pre-dynastic period, the rulers of Egypt, and one of whom founded the united kingdom and began the Dynastic Age, thus producing a lasting enmity between Upper and Lower Egypt. In

those early days, the Egyptians must have been comparatively peaceful ; fighting was sporadic, and no standing armies existed, the rulers relying on militias to do the fighting. It was only in later times, when the kings had to contend with a powerful nobility bent on obtaining independent power, that fighting began seriously, and the kings started to engage men to fight their battles.

The story of warfare is that of the increasingly violent behaviour of ruling groups, doubtless stimulated by a variety of causes once it became organized. The institution of personal property, so closely associated in its beginnings with rulers, the very fact itself of possessing power and desiring more, have doubtless played important parts in accentuating this form of behaviour. In the case of the later warrior aristocracies there is no doubt that these two incentives have been potent. Fear of rivals has also played an important part in the process ; so, also, the army itself, once in existence, has produced a profound effect upon all those who have come into close touch with it.

For various reasons mankind has educated itself in force, and the gravest problem with which we are faced is that of eliminating this frame of mind, of banishing the sentiments that so poison human relationships. To perform this mighty task we must go back to beginnings and trace out the process of education step by step.

Of the increasingly violent behaviour of man-

kind there can be no reasonable doubt. The archaic civilization, all the world over, was comparatively peaceful. In Egypt, in early Sumer, in early Polynesia, in the early Maya cities of America, there are no traces of serious fighting, and the traditions in all these places tell of days when all was peace and happiness. It is later on, after the expulsion of the Hyksos in Egypt, after the foundation of the Assyrian Empire, after the first phase of the Maya civilization, that signs of real warfare begin to appear. Polynesian traditions tell of the days when peace reigned over the Pacific, and chiefs went thousands of miles to join in celebrations; they tell, also, of the days when fighting began in earnest, and rulers stayed at home for fear of their fellows (3). The early kings of the Teutons, those of Sweden, were peaceful; fighting began with the later movements (4). Crete was peaceful from all accounts; then came warlike Dorians who overwhelmed this wonderful civilization. In all parts of the earth the story is the same—that of increasing violence. The stories of a former Golden Age of peace and happiness, of which that in Hesiod's *Works and Days* is the best example, have a substantial basis in fact. We must not consider these stories from the standpoint of our historical experience in western Europe, but must try to remember what the conditions were in the days when Hesiod and others wrote.

If it be true that organized violent behaviour is really foreign to mankind, that it is a form

of conduct that has been induced by certain institutions, some attempt must be made to understand how it began. It is possible to admit that men many exhibit violent modes of behaviour when greatly provoked, and yet to realize the necessity for explaining how violent behaviour ever became systematized. When did men deliberately begin to do hurt to one another and to organize for the purpose?

The first instance of deliberate violent behaviour to which it seems possible to point is the ritual killing of the king, which presumably took place in early Egypt and Sumer—a custom that still persisted till lately in the region of the Upper Nile and elsewhere. The fertility and prosperity of the country were supposed, in those early days, to rest on the virility of the king, so when he got old and infirm he was killed. This practice did not persist long. Evidently a way out was found, and, instead of the king himself, a victim was found to take his place. These events happened in very early times, and the facts are still rather obscure; but the above is probably as near to the truth as it is possible to get to-day from the examination of large masses of evidence (5). It is interesting to note that with the substitution of a subject for the king, as recounted in the Egyptian story of the “Destruction of Mankind,” there comes over the king, as exemplified in Re, the sun-god, a subtle change of character, and the atmosphere of the story is certainly violent. In Sumer, when the mother goddess

was associated with the sky, which happened in later times, she became definitely warlike. Formerly she had been benign and peaceful.

When the archaic civilization spread about the world it took with it the practice of human sacrifice—not of the king, but of a slave or of a captive of war. And, so far as the evidence warrants, much of the warfare of these early communities, from India to America, was concerned with the getting of victims for human sacrifice in connexion with agriculture, the sun-cult, with the building of new houses or canoes, and with the funerals of chiefs (6).

It is possible, by comparing those native peoples that were influenced by the archaic civilization with the communities of the archaic civilization itself, to realize that organized violent behaviour is a thing that has to live in a certain environment, and out of which it dies. It sounds paradoxical to hear it stated that the food-gathering communities with which the men of the archaic civilization came into contact only adopted violent modes of behaviour, such as human sacrifice, cannibalism, and organized warfare, when they had acquired much of the culture of the archaic civilization; yet such is evidently the case.

This can be realized with great ease in the case of Mexico and North America. Human sacrifice reached a terrible intensity under the Aztecs of Mexico, who, after their domination of Mexico, had acquired so much of the culture of the archaic civilization. In addition, canni-

balism was practised, the victim being eaten by the family of his capturer. Cannibalism never spread far from Mexico, only certain tribes of the Gulf of Mexico having been known to have practised it systematically. Again, human sacrifice was only known in the United States—the peoples of which got their culture from Mexico—among those tribes, such as the Iroquois and the Skidi Pawnee, whose culture approached closest to that of the South; that is to say, the people of the lower culture were not very willing to adopt customs of revolting cruelty. In one case—that of the Natchez of Louisiana—it is said that certain members of the ruling family migrated because they objected to the custom of human sacrifice. This is similar to the story of Ui, the ancestress of the ruling group of Samoa, who persuaded the sun-god of her homeland to do away with human sacrifice.

In the East Indian Archipelago there can be witnessed a like toning-down of warlike customs as the cultural level drops. The peoples of that region, with the exception of those who have of late centuries come under the influence of more highly civilized peoples, practise head-hunting. They need heads for certain ceremonial purposes, these purposes being the same as those for which the people of the archaic civilization required human sacrifices. In the case of the tribes of the interior of Borneo it can be shown that formerly the most highly civilized of them practised human sacrifices

202 THE GROWTH OF CIVILIZATION

for the funerals of their chiefs and other purposes. But in all parts of the island the tendency has been for human sacrifice to give way to the less inhumane practice of head-hunting. When a Borneo tribe requires a head for agricultural or funeral ceremonies it forms an expedition, which goes to some other village, near or far. The warriors wait in ambush, so as to strike off the heads of the first passers-by. If they are successful, they go away at once without any fighting. Sometimes they are detected, and fighting takes place, but it is never serious. When the attackers have lost one or two of their number, or when they have got some heads from the enemy, they break off and go home. Of open fighting, such as we know of in modern times, there is none (8).

It is not possible to account for the Borneo fighting on the basis of an innate pugnacious tendency. Sometimes a tribe will wait for two or three years before getting heads. When making their plans they may go to a village that had taken some of their heads, but in such a case there is hardly here any question of emotion. Revenge it certainly is, but not of the type that leads to violent behaviour.

There is no reasonable doubt as to the origin of the practice. The natives have been civilized by strangers, who have taught them agriculture, and have insisted on the necessity for some sort of human sacrifice if their crops are to grow, for the funerals of chiefs, and so forth. This practice has therefore become one of their

customs, and they think it perfectly natural to get heads for their agriculture, so much so that, in the case of Sarawak, it was found necessary, when head-hunting was stopped, to keep a store of heads in a central depôt for the use of the tribes.

The case of the Borneo head-hunters is important in the study of the beginnings of organized violent behaviour in different parts of the earth, for several of the head-hunting tribes were demonstrably peaceful food-gatherers a few generations ago. Their warfare consists entirely of head-hunting expeditions. Thus it is the outcome of their acquisition of certain institutions, which are derived, ultimately, from the customs associated with the ruling classes of the archaic civilization.

Human sacrifice has always been associated with ruling groups, either for their funerals, or for the ritual that they performed in connexion with agriculture. When human sacrifice is handed on, together with agriculture, to less highly civilized peoples, it tends to die out, or to be replaced by the sacrifice of animals, or of offerings of fruits and flowers. Only in the case of ruling groups closely associated with the archaic civilization itself, the most highly developed culture in any part of the world in antiquity, do human sacrifice and cannibalism flourish. This is only another instance of the general theorem that an element of culture only thrives in its original environment, and tends to die out when it is transplanted. The

peoples of the archaic civilization, or perhaps, one should say, the ruling groups, persuaded themselves that they had to do these dreadful things, and that the whole fabric would dissolve if they did not, just as in our own country it was formerly thought necessary for men to be hanged for stealing, in order that the State might persist. Less sophisticated folk, who did not understand this line of reasoning, failed to perform human sacrifices, or, if they thought it necessary, modified the practice and took heads, or even went so far as to sacrifice an animal instead. The study of human sacrifice is an impressive example of the influence of institutions on human behaviour. A practice that would unhesitatingly be put down to "bloodthirsty savages" is really the result of a train of reasoning that took place within highly civilized communities, so that men persuaded themselves of the dreadful necessity of taking human life for the supposed benefit of mankind.

As an instance of the far-reaching effects of violent behaviour in stirring up the passions of men who had no part in the original quarrel, a remarkable feature of the archaic civilization, from one end of the world to the other, may be mentioned. The political and social constitution of the communities of the archaic civilization was based on the dual organization, each community being divided into two distinct parts. It is found practically universally that a hostility existed between the two moieties,

This hostility was undoubtedly carried throughout the world and handed on from one community to another.

Its ultimate effects were simply tremendous. For, in Polynesia, and probably also in India—in the great war of the *Mahabharata*—it was a great disruptive force. The two ruling groups fought until they smashed up the old civilization, and thus gave rise to the migrations of warrior aristocracies that ensued. Even in America the *Popol Vuh*, the traditional writings of the Kiche of Guatemala, contains ample traces of the same active hostility between ruling groups, in this instance between the kings of the Kiche and of Xibalba. It is curious to think that a quarrel that presumably began in Egypt should have been carried throughout the world, so that communities in New Guinea are at the present day still fighting out the old quarrel, the cause of which is unknown to them. Professor Seligman recounts how the Mekeo tribes, who live in British New Guinea, are divided into two divisions, so that fighting always takes place between communities belonging to opposite divisions, and never between those belonging to the same division.

This instance is peculiarly instructive, in that it shows that a form of behaviour which would be expected to result from accidental causes is really determined strictly by circumstances. To find that men are fighting on account of a sentiment that has been transmitted to them

opens up new vistas in the field of relationships between communities, and serves to emphasize still more clearly the imperative necessity for a thoroughgoing inquiry into the origin and history of warfare.

The hostility of the dual organization has another important feature. Only where the communities had definite ruling classes was this hostility disruptive. In other cases it confines itself to mutual dislike, and to rivalry in the ball game that is so widely played by communities with the dual grouping.

Although in the earliest times in Egypt there was no standing army, yet there was some sort of military organization, so that heads of the armies are found in communities throughout the archaic civilization. These army leaders were drawn from that side of the ruling group that finally triumphed in places like Polynesia. It can be shown, in one instance at least, that the military machine has had profound effects on the behaviour of the community that has come to possess it.

The Indian tribes of the United States can be divided into two distinct groups: the food-gatherers and the food-producers. The food-gatherers are entirely peaceful. The food-producers, on the other hand, indulged, prior to the coming of Europeans, in a certain amount of fighting. All these tribes had acquired, ultimately, it seems, from Mexico, a military organization, and every male child was brought up to be a warrior. Military training was part

of his education, so that, when adult, he was fully prepared to manifest that form of behaviour if necessity should arise. Both sets of tribes, the peaceful and the warlike, are of the same stock, and their environments are similar; there is thus no question of calling in climatic or other such influences to account for the distinction between them; nor is there a particle of evidence to suggest that the warlike tribes independently invented their military organization, which is similar from tribe to tribe. The only reasonable explanation of the facts is that the adoption of the military organization induced a violent mode of behaviour as part of the regular relations between tribes.

This instance is strikingly akin to those already cited from the works of Professor Chadwick, where the peoples on the borders of the Roman Empire were educated in military matters by service in the Roman Army. Cases such as that of Chaka, who learned military organization from Europeans, and then applied it to the Zulu, could also be mentioned. The military machine is a powerful agency in the militarization of mankind.

Mankind's education in violence has, it seems, proceeded along more than one path. It has also had more than one consequence. Apart from warfare, it can be shown with much probability that the subjection of women, the violent treatment of children—to mention only two things—have resulted therefrom. In

food-gathering communities, and among many peoples of the lower culture, women are the equals of men, as they were in the archaic civilization. It is to people such as the Turks that we have to turn for the subjection of women. Again, children are petted and spoiled among food-gatherers and peoples of lowly culture. We have to turn to the Old Testament, with its atmosphere of violence, to Sparta, to really warlike peoples, for robust notions as to the proper treatment for a child. Action and reaction go on in a society that has learned violence, and the final result is a great accentuation of this form of behaviour. Treat a child violently, and it will react violently; it will look on violence as natural. Such is the vicious circle.

How is it possible, on the hypothesis that dynastic continuity holds throughout the whole of civilization, to account for the vast difference in behaviour between the rulers of the earliest civilizations and those of the warlike peoples who arrived so much later on the scene? The contrast is great, and there must be some means of explaining it.

In the earliest civilizations the king was so hedged round with restrictions that he had very little power of exercising his own will. He was usually the high priest of the State, not its secular ruler. His civil power was controlled by a council, approximating somewhat to our House of Lords, and all great decisions of State were taken by this council. That is the manner

ORIGIN AND DEVELOPMENT OF WAR 209

in which, among others, the old States of Scandinavia were ruled. The king was somewhat in the position of the Mikado of Japan—a figure-head, who simply performed certain ceremonials on behalf of the community as a whole. He had nothing whatever to do with warfare. Leaving on one side the question of the increasingly warlike behaviour of the ruling groups in these old civilizations, as the result of the influence on them of certain institutions, such as that of personal property, it can be realized how the conditions of the outward movements of princes in search of kingdoms could easily work a transformation in their attitude towards their subjects. The difference between a king of the type of the Mikado of Japan, who rules over a State by the aid of a constitution derived, ultimately, from Egypt, and kings such as ruled over the first Anglo-Saxon kingdoms in England, is tremendous. The Anglo-Saxon king imposed himself on strangers as their ruler, and he had no obligations whatever towards them. Provided he could control his nobles, the descendants of his followers, and could keep his rival rulers of other States at bay, he was secure, and could do what he liked within his kingdom, subject, of course, to any resistance that his subjects might in time offer to his exactions. I may perhaps be allowed to quote here, once again, the weighty words of Professor Chadwick, who so well describes the form of behaviour of these kings in his work on *The Heroic Age* :

“The Heroic Age, both Greek and Teutonic, presents us with the picture of a society largely free from restraint of any kind. In the higher ranks tribal law has ceased to maintain its force; and its decay leaves the individual free from obligations both to the kindred and to the community. He may disregard the bonds of kinship even to the extent of taking a kinsman's life; and he recognizes no authority beyond that of the lord whose services he has entered. The same freedom is exhibited in his attitude towards the deities.

“It is of course in princes that we find these features most strongly developed. That which they prize above all else is the ability to indulge their desires to the full—in feasting and every form of enjoyment for themselves, in unlimited generosity to their friends, in ferocious vindictiveness towards their foes. The hero of the *Odyssey*, when his opportunity arrives, sets no limit to the vengeance which he exacts, from prince, goatherd, and maid-servant. His story furnishes a fitting parallel to that of Albion, whose brutal conduct brought upon him so swift a retribution. And it is to be remembered that this Albion's generosity was a theme of poetry from Italy to England” (page 462).

The behaviour of the Israelites towards the conquered Midianites is a fitting parallel to this account. Think, also, of the massacre of half a million people of Merv by Genghis Khan, and you have an idea of the frame of mind of such men. Their situation has made them

ferocious beyond any conception. They have been in control all the world over of the military machine. As Professor Chadwick says, the old Anglo-Saxon kings of England, descended from Odin, were warrior kings. The army consisted of the ruling group. The agricultural population played no part in the fighting, and had no control whatever over foreign affairs. Warfare was an aristocratic profession: it was *le grand jeu* of the old French nobility.

If the analysis carried out in the past three chapters be correct, then it follows that two great tendencies are at work in civilization. On the one hand, there is the constructive tendency, which has caused men to discover one thing after another, to elaborate the arts and crafts, to open up and to strive to maintain communications between all parts of the earth, to colonize fresh countries where desirable things were to be found, to write books, poems, and plays, to paint pictures, to compose music, to do the thousand and one things that make civilization worth while.

At the same time, certain faults inherent in the relationships that have arisen between men in the course of the development of civilization have set up social disharmonies. The great task of the future is to eradicate these disharmonies, so far as it is possible. It may be impossible to frame a society in which each member lives a calm, happy, creative life. But it has yet to be proved that this is so. The

212 THE GROWTH OF CIVILIZATION

scientific study of human society has hardly yet begun. We are still largely in the hands of the dilettantes, and speculation holds the field. It is only by trying to understand exactly how civilization did develop, by taking nothing at all for granted—not even our most cherished beliefs and convictions—that any real advance is possible. If the main contention of this last chapter is true—if men are really intended to live at peace, to mix harmoniously with their fellows—it is our bounden duty to search through the past for the causes of dissension that divide us, so that we may be able to alter the social institutions that work to our harm, to eliminate the sentiments that obscure human intercourse, and prevent us from realizing the real nature of ourselves and of our fellow-creatures, and, ultimately, to build up the perfect society. . . .

NOTES

CHAPTER II

(1) See A. C. Haddon, *The Races of Man*, for a brief account of these peoples.

(2) For information on the Old Stone Age see M. Burkitt, *Prehistory*, Cambridge, 1922; J. Déchelette, *Manuel d'archéologie celtique et gauloise*, Paris, 1908; R. A. S. Macalister, *A Text-Book of European Archæology*, Cambridge, 1921; H. F. Osborn, *Men of the Old Stone Age*, London, 1921; W. J. Sollas, *Ancient Hunters and their Modern Representatives*, 2nd Ed., London, 1915.

(3) The meaning of these images has been discussed in *The Origin of Magic and Religion*, London, 1923. See also Elliot Smith, *The Evolution of the Dragon*, Manchester, 1919. In the volume of *l'Anthropologie* for 1923 there is figured a new discovery of an Aurignacian feminine figurine of remarkable shape, carved in ivory. It seems to consist of a shell with human limbs and trunk added.

(4) Karge, *Rephaim*, Paderborn, 1917.

(5) R. B. Foote, *Indian Prehistoric and Protohistoric Antiquities*, Madras, 1916, p. 36.

(6) J. W. Jackson, *Shells as Evidence of the Migration of Early Culture*, Manchester, 1917, pp. 135-7.

CHAPTER III

Readers will find ample references in *The Cambridge Ancient History* (Cambridge, 1923), to the topics here considered. See also Elliot Smith, *The Ancient Egyptians*, 2nd Ed., London, 1923; Art. "Anthropology" in *Encyclopædia Britannica*, 12th Edition, Supplementary Volumes, 1922; also H. R. Hall, Art. "Archæology" in the same work.

(1) R. Pumpelly, *Explorations in Turkestan*, Washington, D.C. 1907.

(2) J. de Morgan, *Mémoires de la Délégation en Perse*, Vols. 1, 7, 8, 12, 13.

(3) T. Cherry, "The Discovery of Agriculture," Australasian Association for the Advancement of Science, 1921.

(4) Consult the works already quoted; also J. H. Breasted, *A History of Egypt*, London, 1919; G. Baldwin Brown, *The Arts in Early England*, London, 1915; J. Capart, *Primitive Art in Egypt*, London, 1905; W. F. Edgerton, "Ancient Egyptian Ships and Shipping," *American Journal of Semitic Languages and Literature*, XXXIX, 1923; Elliot Smith, *Ships as Evidence of the Migrations of Early Culture*, Manchester, 1917; W. Lethaby, *Architecture*; E. O. v. Lippman, *Entstehung und Ausbreitung der Alchemie*, Berlin, 1919; G. A. Reisner, *The Early Dynastic Cemeteries of Naga-ed-der* (University of California Publications, 1908; *Archaeological Survey of Nubia*, 1907-8).

(5) J. de Morgan *l'Anthropologie*, 1921, pp. 428, 443.

(6) *Mémoires de la Délégation en Perse*, Vol. 13.

(7) Flinders Petrie, *Prehistoric Egypt*, summarizes the knowledge on this subject.

(8) Elliot Smith, *Ancient Egyptians*.

(9) *Journal of Egyptian Archaeology*, Vols. 6, 7, 1920, 1921; also *The Cambridge Ancient History*.

(10) See L. W. King and H. R. Hall, *Egypt and Western Asia*, London, 1907; L. W. King, *A History of Sumer and Akkad*, London, 1910.

(11) In *The Children of the Sun* evidence is collected to show the widespread incidence of degradation of culture.

CHAPTER IV

(1) A. J. Evans, *The Palace of Minos*, London, 1921.

(2) Elliot Smith (*Migrations of Early Culture*, Manchester, 1915; *Evolution of the Dragon*, 1919) has told the story of the origin and development of this practice. See also *The Origin of Magic and Religion*.

(3) This aspect of the story is treated in greater detail in *The Origin of Magic and Religion*.

(4) J. Fergusson, *Rude Stone Monuments*, London, 1872; W. C. Borlase, *The Dolmens of Ireland*, London, 1897; T. E. Peet, *Rough Stone Monuments*, London, 1912; Perry, *The Children of the Sun*; Karge, *Rephaim*, and O. G. S. Crawford (Ordnance Survey Professional Papers No. 6), have recognized the resemblance between dolmens and Egyptian mastabas.

(5) Perry, "The Problem of Megalithic Monuments and their Distribution in England and Wales," *Mem. and Proc. Manchester Lit. and Phil. Soc.*, 1921.

CHAPTER V

This chapter is based mainly on *The Children of the Sun*, where the reader will find numerous references.

(1) See Elliot Smith, *The Evolution of the Dragon*, and my *Origin of Magic and Religion* for a fuller discussion of these matters.

(2) Elliot Smith, *Ancient Egyptians*.

(3) See *Children of the Sun*, pp. 501-2, for an account of the Phœnicians.

(4) Karge, op. cit.

(5) See *The Children of the Sun*, and especially the maps.

(6) W. Radloff, *Aus Sibirien*, Leipzig, 1884.

(7) *The Children of the Sun*, p. 276.

CHAPTER VI

See A. C. Haddon, *The Wanderings of Peoples*, Cambridge, 1911; Perry, *The Megalithic Culture of Indonesia*, Manchester, 1918; *War and Civilization*, Manchester, 1918; *The Children of the Sun*, for references to the facts cited in this chapter.

CHAPTER VII

Much of the information used in this chapter will be found in Dr. Haddon's excellent little book, *The Wanderings of Peoples*.

(1) *The Cambridge Ancient History*.

(2) Breasted, *Ancient Records of Egypt*, London, 1907; *History of Egypt*.

(3) Déchelette, op. cit.

(4) C. de Ujfalvy, *Les Aryens au nord et au sud de l'Hindou-Kouch*, Paris, 1896.

CHAPTER VIII

(1) H. M. Chadwick, *The Origin of the English Nation*, Cambridge, pp. 163, 314, 321.

(2) H. Bradley, *The Goths*, 1888.

(3) Chadwick, *The Heroic Age*, Cambridge, 1912, p. 377.

(4) Eduard Meyer, *Geschichte des Altertums*, II, 69 seq; Rawlinson, *Herodotus*, II, 272n. 4. The Greek assertion that the kings of Egypt and of Phœnicia were brothers is interesting in view of what we know of Phœnician culture (see p. 84).

(5) *The Children of the Sun*.

(6) Baldwin Brown, op. cit., III, Chap. IV.

(7) This does not preclude the possibility of profound inter-mixture with the various Mongol ruling groups that have irrupted into India.

(8) E. H. Parker, *A Thousand Years of the Tartars*, London, 1895.

(9) F. Hirth, *The Ancient History of China*, New York, 1908.

(10) Parker, *Ancient China Simplified*, London, 1908, p. 137.

(11) S. Percy Smith, *Hawaiki*, London, 1910. *The Journal of the Polynesian Society* contains vast stores of information on this topic.

(12) G. A. Barton, *A Sketch of Semitic Origins*, New York, 1902, p. 53.

(13) This evidence will be found summarized in *The Children of the Sun*.

(14) *The Megalithic Culture of Indonesia ; The Children of the Sun ; "An Interpretation of Old Testament Traditions," Journl. Manchester, Egyptian and Oriental Society, 1921-2, 1923.*

CHAPTER IX

(1) Elliot Smith, *The Evolution of the Dragon*, p. 29.

(2) *The Children of the Sun*, pp. 439 seq.

CHAPTER X

(1) Perry, "An Ethnological Study of Warfare," *Mem. and Proc. Manchester, Lit. and Phil. Soc.*, 1917; "The Peaceful Habits of Primitive Communities," *Hibbert Journal*, Oct., 1917.

(2) Perry, "Pugnacity," *The Monist*, 1923.

(3) *The Children of the Sun*, Chapter XI.

(4) Chadwick, *The Origin of the English Nation*.

(5) *The Children of the Sun*, pp. 238-9.

(6) Op. cit., Chapter XV.

(7) Op. cit., p. 326.

(8) C. Hose and W. McDougall, *The Pagan Tribes of Borneo*, London, 1912.

INDEX

- Abraham, ancestor of ruling groups, 170, 171; and pastoral life, 134, 135
- Abydos, 80
- Acheulean, distribution, 10; name site on Somme, 16; stage of stone industry, 9
- Adonis and Osiris, 84
- Ægean, early civilization of, 24; origin of, 50
- Africa, Acheulean industry in, 10; Chellean industry in, 10; food-gatherers, 8; megalithic monuments, 63; military aristocracies, 147, 148; taro, 89.
- Agriculture, early, 24; sickles, 24
- Akkad, 48; and Semitic warriors, 129, 130
- Alaska, 110; ruins, 116, 117
- Alchemy, 32
- Amber in Britain, 72; in Scandinavia, 73, 75
- America, archaic civilization, 99-105; beginning of food-producing stage, 23; ensigns, 176; origin of civilization of, 104, 105; war, 205
- Anau, early settlements, 25, 44; no domesticated animals in early settlement, 136; no weapons in early settlement, 196
- Ancient East, home of civilization, 24
- Andamans, negritos, 6
- Anglo-Saxon kings, 177, 211; States in England, 152.
- Animals, depicted in cave art, 14; domesticated, 24; ensigns, 176; heraldically opposed, 77; sacrificed in Long Barrows, 67
- Arabia, ensigns, 176; food-gatherers of Old Stone Age, 8; mother-right in, 173; origin of pastoral peoples, 136; settlers in Rhodesia, 114
- Archaic civilization, Chapter V; and human sacrifice, 200; and military aristocracies, 172 et seq.; distribution in Oceania, 96, 98; warfare in, 204, 205
- Architecture and Egypt, 33
- Arizona, 103
- Art, cave, 13-15; animals in, 14; food-supply, 14
- Aryan-speaking military aristocracies, 130, 131; in Asia, 145, 146
- Asia, Old Stone Age industry in, 10
- Asia Minor, early civilization of, 24
- Assyria, war, 198; influence on pastoral peoples, 142
- Attila, 144, 165
- Aurignacian, 9; bone used, 13
- Australia aboriginals, 6, 7; cultural links with Old Stone Age, 8; culture-heroes, 120, 121
- Austria, food-gatherers of Old Stone Age, 8
- Avebury and flint, 73
- Azilian, 9
- Aztecs, 148, 200
- Babylonia, calendar, 184; cultural influence of, 60, 108, 109; early civilization, 24; early war, 129; first civilization from elsewhere, 31; influence of Egypt in, 129, 130; under-world, 59.
- Baelz, 105
- Bahrein Islands, as Dilmun, 46; home of Phœnicians, 84
- Balkans, 24
- Baluchistan, 24
- Bantu ensigns, 176; mother-right, 174; spread of, 114, 147, 168, 169
- Barley at Anau, 25
- Baths in Crete, 58
- Beads, 32

- Behaviour, cause and effect in human, 192, 193 ; human, 192
 Bitumen, Palestine, 85 ; Syria, 50
 Blood, importance of royal, 156
 Boar crest, 176
 Bone harpoons, 15 ; not used before Aurignacian period, 12 ; used in Old Stone Age, 14
 Bontoc, 182
 Borneo, head hunting, 201, 202 ; iron working, 92
 Brick houses, 24-26, 107 ; tombs in Egypt, 62
 Britain, beehive huts, 69, 86 ; Bronze Age tombs, 159 ; megalithic monuments, 63, 65
 Bronze Age, beginnings of, 131, 159, 160 ; weapons of, 196
 Burgundians, 154
 Burial, 26
 Burma, origin of kingdom of Pegu, 110 ; polished stone implements, 94
 Bushmen, 6, 7 ; and Bantu, 114 ; cultural links with Old Stone Age, 8, 10 ; in South Africa, 16
 Byblus, Adonis and, 84 ; Egyptian remains at, 50

 Calendar, lunar, 183 ; solar, 33, 183
 Cannibalism, 200, 203
 Capart, J., 38
 Carolines, dual organization, 96 ; ruins, 95
 Carruthers, D., 144
 Carthaginians, and Egyptians, 84 ; and Romans, 132
 Caucasus, early civilization, 24 ; holed dolmens, 65
 Cave art, 13 ; dwellings, 13
 Cedar, 50
 Celebes, archaic civilization, 95 ; children of the sun, 95 ; ensigns, 176 ; iron working, 92
 Celtic-speaking peoples, 131, 132 ; and Teutons, 156, 160, 176 ; origin of culture, 138, 139 ; spread of, 131, 132 ; swords 161, 162
 Chadwick, Professor H. M., 139, 140, 152, 155, 173, 207, 209, 211
 Chellean distribution, 10 ; industry, 9, 12 ; pre-Chellean, 9, 12
 Cherokee and mounds, 117
 Cherry, T., 29
 Chert implements, 8, 11
 Children, treatment of, 207, 208
 Children of the Sun, and calendars, 183 ; and Egypt, 33 ; as culture-heroes, 119, 120 ; first appearance, 79, 80 ; human gods, 177 ; in Bronze Age, 160 ; in Eastern States, 120 ; Maya, 119, 120 ; Melanesia, 97 ; Peru, 101
 China and calendar, 184 ; and Huns, 165 ; beginning of civilization, 23, 106-109 ; Great Wall, 145
 Christian, F. W., 95
 Cissbury flint mines, 73
 Civilization, a thing in itself, 3, 123 ; and the Mediterranean, 7 ; decay of, Chapter VII ; growth of, 116, 123 ; mode of spread of, 110 ; nature of, 211, 212 ; origin of, Chapter III, 27, 28 ; spread of, in Asia, 102 ; theories as to home of, 44
 Colombia, dual organization, 100
 Continuity in culture, 2 ; in culture between Stone Age and first food-producing civilization, 26, 27 ; in development of Old Stone Age industry, 13 ; in distribution of early civilization, 24
 Copan, elephant carvings, 102
 Copper, at Anau, 25 ; chisel, 35 ; importance of, 44 ; implements of, in early civilization, 24 ; in America, 103 ; in Britain, 69 ; in Egypt, 32, 43 ; in Palestine, 85 ; in Syria, 50 ; mining, 49 ; of Magan, 46 ; origin of use of, 35 ; Upper Yeneisei, 106
 Coral in Egypt, 43
 Cornwall, megaliths and mines, 67-72
 Councils, Egyptian, 82, in early communities, 208
 Crawford, O. G. S., 66
 Crete, cultural influences of Egypt, 60, 75, 158 ; early

- civilization in, 24; early palaces, 58; Egypt and early civilization in, 50-52, 158-160; Egypt and Minoan Age, 51-52; no Old Stone Age, 50, 51; peaceful, 198
- Culture heroes, Australian, 121, 122. *See* Children of the Sun
- Daggers and swords, 161; bronze, 159
- Danaus, 157
- Danube, early civilization, 24
- Dartmoor, megaliths and mines, 68, 69
- Degradation of culture, 55, 56, 111, Chapter VI; and war-like peoples, 128, 146
- Déné, 6
- Denmark, megalithic monuments, 63
- Derbyshire, megaliths and mines, 71
- Dilmun, 46, 47
- Diorite, in Sumer, 48; of Magan, 46, 47
- Distribution, caves, 17; of archaic civilization, 114; of culture, 115; of men and sources of raw materials, 16-18, 54, 74, 146; of Old Stone Age finds in Britain, 17; Dolmen, 64; Canaan and Armenia, 106; holed, 64, 65; Palestine, 85; Uganda, 148; Upper Yen-eisei, 106
- Dorians, 131, 198
- Dorset, early settlement of, 73, 74
- Drainage systems in Crete, 58
- Dual organization, 77; and warfare, 204, 205; Carolines, 96; distribution in Oceania, 96, 97; India, 92; Indonesia, 95; Phœnicia and Carthage, 84
- Dzungaria, 144
- East Indian Archipelago. *See* Indonesia
- Egypt, and archaic civilization, Chapter V; and Greece, 157-160; and world's history, 61; as Magan, 47; bone harpoons, 20; cultural influence in Africa, 147; culture in San Cristoval, 87; early war in, 129, 196; ensigns, 175; flint, 18, 20, 29; flint knives, 20; food-gatherers of Old Stone Age, 8; home of civilization, Chapters III, V; human sacrifice, 199, 200; killing the king, 199; Old Stone Age of, 19; peaceful, 198; royalty, 162, 179, 181-185; Solutrean industry in, 11; supremacy in technique, 38-42; taro, 89
- Elam, as home of early civilization, 28; early civilization, of, 24; origin of civilization of, 45
- Elephant carvings at Copan, 102
- Ellenberger, D. F., 168
- Ellice Islands, 97, 98
- Elliot Smith, G., 87, 88; on Egypt, 33, 34, 44; on elephant carvings in America, 102; on mastabas, 63; on Old Stone Age, 9, 10; on origin of kingship, 18
- Emery, in Egypt, 32, 43; from Naxos, 50
- England, Acheulean, 10; Chellean, 10; Old Stone Age, 17, 18
- Enki, 46
- Ensigns, 175, 176
- Eridu, 46; stonework at, 63
- Esau, 171
- Eskimo, 6; cultural links with Old Stone Age, 8
- Etruria, and Celts, 138, 139; and Rome, 132, 141
- Europe, food-gatherers, 8; stages of Old Stone Age in, 10, 11
- Evans, Sir A. J., 158
- Expeditions, Egyptian, for raw materials, 36, 49, 83, 86; led by men of high rank, 59, 60, 62, 153, 155; mining, 43; of military aristocracies, 153, 155, 162
- Ezekiel, importance of Book of, 85
- Faience in Egypt, 32
- Fear and warfare, 197
- Feathers, 49
- Figurines, carved, in Old Stone Age, 15

220 THE GROWTH OF CIVILIZATION

- Fiji, 166
 Fire in Old Stone Age, 13
 Flint, and early settlement in Britain, 73, 74; implements, 8, 11; implements in early food-producing communities, 24, 25; industry, development of, 12; mines in Britain, 73; workshops, 16, 17
 Food-gatherers, and food-producers, 5; conversion into food-producers, 23; encroached on by food-producers, 115; family groups, 180; in Europe, 7, 8; list of, 6; stone industry in Europe, 8. *See* Old Stone Age, 4, 5, 6
 Food plants, transportation of, 98, 99
 Food-producers, 5; and food-gatherers, 5; first in Europe, 10
 Foote, Bruce, 18
 Fox, Dr. C. E., 87
 France, Acheulean, 10; Aurignacian, 10; cave art in, 13, 14; Chellean industry in, 10; distribution of Old Stone Age finds, 17; food-gatherers, 8; holed dolmens, 65; importance of, in Old Stone Age, 21; irrigation, 182; Magdalenian, 11
 Furniture in Egypt, 33
 Galena, 43
 Gaul, 173
 Genealogies, Polynesian, 166, 167; Rajput, 164
 Genghis Khan, 114, 144, 210
 Germany, Acheulean, 10; Chellean, 10; food-gatherers of Old Stone Age, 8; megalithic monuments, 63; Teutons, 154
 Gilbert Islands, 97, 98
 Glaze, Egyptian, 32
 Gods, cults of, and ruling groups, 177; human, 152, 177
 Gold, 49; America, 103; and military aristocracies, 143, 146; and trade routes, 143; Britain, 68, 69; China, 106; Egypt, 32; in Bronze Age, 159; Korea, 105; of Meluhha, 46; Turkestan, 107, 108; Upper Yeneisei, 106
 Goths, 154, 155; Visigoths, 156
 Graphite, 72
 Graves, First Dynasty, 62; of Egyptian nobles, 62
 Great Mother, becomes warlike, 199, 200; images in early civilization, 27; in America, 119; Teutonic, 176
 Greece, and Celts, 138; and Rome, 132, 141; early civilization, 24; early States, 156, 157; Egypt and, 52, 157; origin of ruling groups, 157-160
 Grimes' Graves flint mines, 73
 Guatemala, 99
 Gunkel, 169
 Hæmatite, 43, 74
 Hall, H. R., 39
 Harpoons, 15, 20, 29
 Hats, 33
 Hawaii, 166
 Heliopolis, 79, 81
 Herakleida, 158
 Herodotus, 157
 Hirth, F., 165
 Holland, 63
 Horn, 12
 Horse, 130, 131, 136
 Houses, Cretan, 59
 Howorth, Sir H., 142, 164
 Huitzilopochtli, 177, 178
 Human society, development of war, 3; originally peaceful, 3
 Huns, 164, 165
 Huntington, E., 143
 Hut circles, 68, 69
 Hyksos, 130, 131, 198
 Igneous rocks, 11
 Immortality, effect of ideas of, 38, 58; ideas of, 33; mummification and, 59
 India, Acheulean, 10; Aryans, 145, 146; beginning of food-producing civilization, 23; Chellean, 10; distribution of Old Stone Age implements, 18; dual organization, 92; early intercourse with, 87; ensigns, 176; food-gatherers, 6; holed dolmens, 65;

- home of Polynesians, 93 ;
megaliths and mines in,
90 ; Old Stone Age, 8 ; war,
205
- Indo-China, Tai-Shan in, 147
- Indonesia, dolmens, 94 ; head-
hunting, 201 ; polished
stone implements, 94 ; stone
images, 94
- Initiation, 118
- Inlay in Egypt, 32
- Intercourse between Egypt and
Sumer, 47 ; foreign, of
Egypt, 43
- Invention, Egyptian, 32 ; lack
of, among Celts and Teutons,
138, 139 ; not common, 11,
113, 119 ; origin of, 34, 56
- Ireland, Bronze Age tombs, 159 ;
megaliths and mines, 71, 72
- Iron and megaliths in India, 91
- Iron pyrites and Long Barrows,
75
- Irrigation, Anau, 25 ; and king-
ship, 182 ; Carolines, 95 ;
forms transition to food-
production, 28 ; in early
India, 91 ; in Mesopotamia,
49 ; Melanesia, 97 ; Pales-
tine, 85 ; Peru, 100 ; Susa,
26 ; Turkestan, 107, 108 ;
Upper Yeneisei, 106
- Ishmael, 136
- Isles of the Blest, 59
- Israelites, 176, 210
- Italy, Acheulean, 10 ; Chel-
lean, 10 ; copper, 65 ; early
civilization in, 24 ; mega-
lithic monuments, 63
- Ivory, 29, 59
- Jackson, J. W., 70
- Jade, 106
- Japan, 105, 106, 175, 176
- Jet, 72
- Jewellery, 32
- Joubainville, Arbois de, 157
- Jutes, 152
- Kassites, 130
- Khasi, 91
- Kilt, 33
- King, divine, 152 ; functions of
early, 184, 199, 208, 209 ;
origin of, Chapter IX
- King, L. W., 39
- Korea, 105
- Lamps, 33
- Langdon, 47
- Lapis lazuli, 43
- Lead, Anau, 25 ; Britain, 71 ;
Egypt, 33, 43 ; Palestine,
85 ; Syria, 50
- Lombards, 154, 174
- Long Barrow, 64, 66, 67
- Lucian, 157
- Lyll, Sir A., 163
- Mace, 32
- Mackenzie, D. A., 34
- Magan, 46, 47
- Magdalenian industry, distribu-
tion, 11 ; Egypt, 29 ; stage
of stone industry, 15, 195
- Maglemosian industry, 9
- Mahabharata, 163, 205
- Malabar, 87
- Malachite, 34, 35
- Malay Peninsula, 94
- Maori, 167
- Marriage, between chief's families
in Carolines, 96 ; between
blood relatives, 101 ; Egyp-
tian royal, 82 ; rules in
Australia, 121
- Mastaba, 63, 78, 79 ; San Cris-
toval, 88
- Maya, and Asiatic culture, 101 ;
and Children of the Sun,
119, 120 ; civilization, 101 ;
early, peaceful, 198
- Mediterranean, Aurignacian in-
dustry, 10 ; and civiliza-
tion, 23 ; and development
of culture, 7, 8 ; and
European culture, 138, 139 ;
types at Anau, 25
- Megalithic, architecture, origin
of, 63 ; monuments and
mastabas, 64 ; and metals,
67-75, 90, 91 ; and ruling
groups, 66 ; distribution of,
63, 64 ; in America, 99, 101 ;
in Oceania, 97
- Mekeo, 205
- Melanesia, 97
- Melos, 50
- Meluhha, 46
- Memphis, 80, 81
- Mexico, calendar, 184 ; human
sacrifice, 200, 201 ; military
aristocracies, 148 ; spread
of culture from, 103, 206
- Mica, 43

222 THE GROWTH OF CIVILIZATION

- Military aristocracies, Chapter VII; always near civilization, 134; and class States, 150; and gold, 143, 146; continuity, Chapter VIII; destroy civilization, 134; incentives that animate 143-148; move towards civilization, 132, 142-144; originate on boundaries of civilizations, 139-141; origins of, Chapter VIII; parasitic, 141, 147; place of origin of, 137; swords, 161, 162; vicissitudes of, 155
- Military organization and ruling groups, 211; effects of, 197, 206
- Mind, importance of human, in development of civilization, 123
- Mingana, Dr. A., 174
- Mining, and civilization in Mexico, 103; Burma and Malay Peninsula, 94; early, and spread of culture, 109-111; Egyptian, 44; in early India, 90, 127; megaliths and, 67-75; New Guinea, 97, 127; Rhodesia, 114, 127; sudden abandonment of 126, 136; United States, 103; Upper Yeneisei, 106, 127
- Minos, 59
- Mongolia, 141
- Morgan, J. de, 25, 39
- Moser, 108
- Mother-right, 172-174
- Mounds, 104, 117
- Mountain symbols, 46
- Mousterian, 9, 13
- Mummification, America, 99; and mastabas, 63; effect of, 59; Egypt, 33, 38; in Mycenaean civilization, 158; Melanesia, 97; Peru, 101; San Cristoval, 88; Torres Straits, 88
- Munn, Major L., 91
- Muskhetov, 108
- Musical instruments, 33
- Mycenaean civilization of Greece, 56, 158, 159
- Natchez, 120, 201
- Naxos, 50
- Negrito, 6, 7,
- New Caledonia, 97
- New Guinea, and Australian culture, 122; Archaic civilization, 97; war in, 205
- New Mexico, 103
- New Zealand, 166, 167
- Nicholls, 106
- Nile flood, 29; green, 34
- Nilometer, 183
- Noah, 169, 170
- Nomes, 82
- Normans, 154
- Nubia, 37, 38, 47
- Obsidian, 43, 50
- Ochre, 72
- Odin, 152, 177, 211
- Old Stone Age, Chapter II; and modern food-gatherers, 10; stages, 8, 9
- Oro, 177
- Paleolithic. *See* Old Stone Age
- Palestine, 18, 63
- Parker, Prof. E. H., 142, 164
- Pastoral, life, 65; follows agriculture, 134-137; tribes, origin of Chapter VII
- Pawnee, 201
- Peaceful condition of early times, 127, 129, 195, 198; food-gatherers, 194, 195
- Pearl, archaic civilization, 93; America, 103, 104; India, 93; Indonesia, 95; Oceania, 97
- Persia, 108, 152
- Persian Gulf, 46, 87
- Peru, archaic civilization and, 99, 100; double-spouted vases, 100; dual organization, 100; stone watch towers, 86
- Philippines, 6, 7,
- Phoenicia, Adonis, 84; and early civilization in Syria and Palestine, 85, 86; cultural relationship to Egypt, 84; distribution of Old Stone Age in, 18; food-gatherers of, 8; and Bahrein Islands, 84
- Picts, 173
- Polished stone implements, archaic civilization, 94;

- early civilization, 38 ; Egypt (Nubia), 32 ; origin of, 37 ; Susa, 26
- Polynesians, 165-168 ; mother-right, 174 ; peaceful in early times, 198
- Portugal, 63, 65
- Pottery, American, 99 ; early, 24 ; Egypt, 32 ; double-spouted, 77, 100 ; origin of, 35 ; painted, 24-26, 40 ; pre-dynastic painted, 36
- Property, personal, and war, 197
- Pueblo, 182
- Punan, 6
- Punt, 49 ; as Meluhha, 47
- Puranas, 163
- Pyramid, Age, 79 ; America, 99, 101 ; Babylonia, 48 ; China, 107 ; origin of, 79 ; Peru, 101 ; Twelfth Dynasty and Bronze Age tombs, 158-160 ; Upper Yeneisei, 106
- Quartzite, 11
- Railways and ancient sites in Mexico, 103
- Rajputs, dynastic continuity, 163 ; ensigns, 176 ; origin of, 146
- Rarotonga, 166, 167
- Resin, 43, 49
- Rhodesia, 114
- Rivers, W. H. R., 87
- Romans, 132, 141
- Ruddle, 75
- Ruling groups, Chapter VIII ; behaviour of, 208, 209 ; calendar, 183, 184 ; early, and agriculture, 18 ; human sacrifice, 203 ; origin of, 185 ; Scandinavia, 154 ; war, 203
- Russia, 10
- Sacrifice, human, among peoples of lower culture, 200-203 ; and ruling groups, 203 ; origin of 199, 200 ; spread of, 200
- Safed, 85
- Sakai, 6
- Samoa, 166, 167
- San Cristoval, 87, 97
- Sandal, 33
- Sardinia, Bronze Age tombs, 159 ; stone watch towers, 86
- Sargon, 48, 129
- Scandinavia, megaliths and amber, 73, 75 ; origin of Teutons, 138, 154
- Sculpture, 14, 15
- Semang, 6, 7
- Semites, 48, 49, 129-133
- Seri, 12
- Serpentine, 43
- Shaving, 33
- Shells, 19
- Ships, earliest, 36 ; Egyptian, 33, 41 ; Indian, 87 ; Polynesian, 89 ; supposed, on Egyptian pottery, 37 ; Minos 59
- Siberia, Old Stone Age, 10 ; pastoral peoples, 136 ; reindeer keepers, 7 ; Turko-Tartars from, 141. *See also* Upper Yeneisei
- Sickles, flint, 24, 26
- Sidon, 84
- Silver, 33, 43
- Sinai, beehive huts, 69, 86 ; copper, 47 ; early mining settlements, 44, 47 ; stone watch towers, 86
- Sky world, 33, 80
- Smith, Robertson, 137, 173
- Sollas, Prof. W. J., 8
- Solutrean industry, 9, 11, 195 ; technique in Egypt, 28 ; in first civilization, 25, 26
- Spain, Acheulean industry, 10 ; Aurignacian industry, 10 ; Bronze Age tombs, 159 ; cave art, 13, 14 ; Chellean industry, 10 ; copper, 65 ; early intercourse with, 75 ; Egypt and, 60 ; food-gatherers, 8 ; megalithic monuments, 63 ; Old Stone Age, 17, 21
- Spartans, 158, 208
- Spencer, Herbert, 113
- Spinning, 24, 25
- Spontaneous generation, 1, 2
- State, class, Chapter IX ; and food-producers, 186 ; and war, Chapter X ; formation of, 153, 162, 209 ; national States, 187
- Statues, portrait, 33, 63, 88
- Stone, burial chambers in mounds, 104 ; circles, 97 ; construction, 33, 63 ; images, 94 ;

224 THE GROWTH OF CIVILIZATION

- implements, 8, 24; importance of Egyptian industry, 21; industry, 9, 12, 14
- Stonehenge and flint, 73
- Sudan, expeditions, 60; megaliths, 63
- Sumer, buildings, 58; civilization, 24; first inhabitants, 48; home of civilization, 28; killing the king, 199; origin of, 45, 49; origin stories, 46; peaceful, 198
- Sun-cult, America, 101; Bronze Age, 159, 160; Egypt, 33; origin of, 80
- Susa, compared with Egypt, 40-42; early civilization of, 25, 44; no weapons in early settlements, 196
- Swords, 161, 162
- Syria, early civilization in, 24; Egypt and, 50, 84; food-gatherers, 8; megalithic monuments, 63
- Tahiti, 166, 167, 177
- Tai-Shan, 146, 147
- Tamerlane, 144
- Tardenoisian, 9
- Taro, 89
- Tasmania, 6, 8
- Teutons, 132; and Celts, 156, 160, 176; and Romans, 138; early kings peaceful, 198; ensigns, 176; kingdoms in England, 153; origins of, 138; swords, 162
- Timor, 95
- Tin, 68-71
- Tokelau Islands, 98
- Tombs, Egypt, 58; Bronze Age, 158, 159
- Tonga, 166
- Torres Straits, 88
- Tortoise-shell, 43
- Totemism, 120
- Trade routes, 72, 143
- Tradition and history, 120; importance of native, 117
- Transportation of flint implements, 17
- Turkestan, early civilization, 24, 107; pastoral life follows irrigation, 136; warlike peoples of, 144, 145
- Turko-Tartar, 134; and China, 142; from Siberia, 142; mother-right, 174
- Turquoise, America, 103; Anau, 25; Egypt, 33, 43; mining in Sinai, 49
- Tylor, Sir E. B., 113
- Tyre, 84, 85
- Uganda, 147, 148
- Under-world, 59, 119
- Usurpers, 155, 156
- Vases, stone, 24, 33, 40
- Veddas, 6, 90
- Vizier, 81
- War, Chapters VII, X; and ruling groups, 197; beginnings of, 129, 133; development of, 3; education, in, 140, 196; in Borneo, 202; late product of civilization, 133
- Weapons, 195, 196
- Weaving, 24, 33, 35, 36
- Welsh and Roman, 139
- Wheat at Anau, 25
- Wigs, 33
- Wiltshire, 72, 73, 74
- Women, treatment of, 207, 208
- Writing, 99
- Yakut, 114
- Yemen, 136, 137
- Yeneisei, 106
- Yuchi, 120
- Yueh-chi, 146
- Yunnan, 147
- Zulus, 139, 207

